

山东省高校统编教材

# 21世纪

# 高阶英语

| 通用类 |

● 山东省教育厅 主编 ●

石油大学出版社

# 21世纪 高阶英语

(通用类)



石油大学出版社

## 内 容 提 要

本书是大学三年级上学期粗放提高阶段大学生通用英语教材。本书分为 12 个单元,每单元分为 3 部分,第一部分为各种形式的口语训练,形式多样,由浅入深,易说好记。第二部分的阅读实践包括 3 篇文章。文章主要选自近几年的英语期刊杂志,体裁多样。其中第一篇为精读,问题后配有理解练习和讨论题目。第二、三篇为泛读,各专业教师和学生可根据各自的特点确定阅读重点。第三部分为应用写作技巧讲解和练习,先给出模仿的例子,再予以点评。

### 图书在版编目(CIP)数据

21 世纪高阶英语.通用类/卢福林主编. —东营:石油大学出版社,2001.7

ISBN 7-5636-1454-0

I. 2… II. 卢… III. 英语—高等学校—教材  
IV. H31

中国版本图书馆 CIP 数据核字 (2001) 第 034426 号

书 名: 21 世纪高阶英语(通用类)

主 编: 徐文轩 张志仁 王爱哲

责任编辑: 徐 伟 (电话 0546-8392787)

封面设计: 郑 琪

出版者: 石油大学出版社(山东 东营, 邮编 257061)

网 址: <http://www.hdpu.edu.cn/~upcpress>

电子信箱: [erbians@mail.hdpu.edu.cn](mailto:erbians@mail.hdpu.edu.cn)

印刷者: 石油大学印刷厂

发行者: 石油大学出版社(电话 0546-8392563, 8391797)

开 本: 787×1092 1/16 印张: 16.125 字数: 368 千字

版 次: 2001 年 8 月第 1 版第 1 次印刷

印 数: 1—5000 册

定 价: 19.00 元

# 序 言

随着知识经济和信息时代的到来,以及我国加入 WTO 的临近,外语作为一门重要的工具日益凸现出它的重要地位,外语教学改革已经引起广泛的社会关注,应当说,这方面大量广、学时多、周期长的重要基础课倾注了几代人的心血。特别是 20 世纪 80 年代中期,国家教委针对我国改革开放的新形势,对这门课程进行了大力度的调整,颁布了新的教学大纲,实行分级教学,举行全国四、六级统一考试。《大纲》实施十几年来,虽取得了突出的成绩,但与社会发展对人才的需求相比仍有不小的差距。无论从教学的现状还是从教学的结果来看,确实存有不少的问题亟待解决。我们注意到:1. 基础阶段的英语教学仍未能完全把提高学生的英语应用能力放在正确的位置。2. 基础阶段结束后,高年級的英语教学处于一种无序甚至中断的状态。其结果是既难于真正完成并巩固基础阶段的教学成果,也难以如期顺利地进入专业英语阶段的学习。显然,大学英语“上台阶”的困难较大,不利于教学改革的进一步深化。

我们认为,把大学英语这门课程整体向前推进的措施在于改革教学体制,对现有的大学英语教学体系进行调整,在大学三年级仍然要进行大学英语教学,设立三年级大学英语教学单位,设必修课,明确划归大学英语教学序列,开展基础和专业二者之间过渡阶段的英语教学。从实践中我们也发现基础英语和专业英语不能直接“对接”,二者之间必须建立“引桥”方可顺利地到达彼岸。于是,我们开展了



“大学英语三段式序列教学方案”的研究,即大学英语基础阶段(一、二年级)→大学英语提高阶段(三年级)→专业英语实践阶段(四年级)。应当说,三年级提高阶段的英语教学是大学英语教学序列中关键的一环,也是解决大学英语“四年不断线”的重要措施。

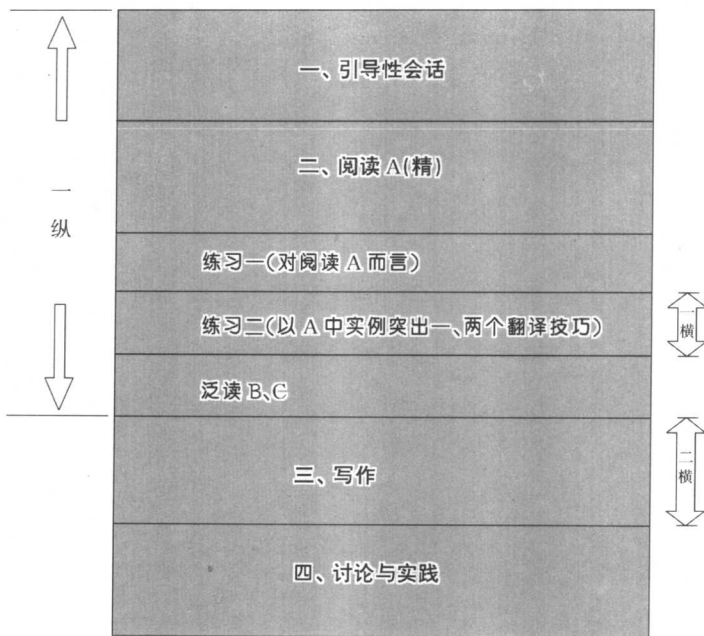
三年级的英语教学是承上启下的重要阶段。为帮助学生实现顺利过渡,我们把三年级提高阶段又细分为两个阶段:三年级上学期为粗放提高阶段,编写通用提高教材一部,供各专业学生共同使用,目的是巩固前期基础英语阶段的学习成果,并在下述三方面向前推进:1. 提高日常口语会话能力;2. 提高基础英语写作水平;3. 加强阅读能力培养。三年级下学期为集约提高阶段,编写分类教材四部,即人文类、经贸类、理工类、农水类各一部,供各专业及相近专业使用,目的是快速把学生带入各自专业的门坎内,并在下述四方面大强度进行训练:1. 英语情景会话;2. 高级英语写作;3. 翻译技巧;4. 准专业英语阅读。通过三年级的学习,以期使学生在有限的时间内,听、说、读、写、译等方面均获得较强的应用能力。

《21世纪高阶英语》就是为上述目的而编写的一套系列教材。教材编写的指导思想有三:1. 突出三个空间。教材给教师留有充分发挥的空间,避免教师照本宣科满堂灌;教材给学生留有充分思考的空间,避免学生沦为教材的奴隶;教材给学生留有充分实践的空间,希望学生动手查阅相关资料、积极主动地进行学习。2. 创立“特区”。教材的编写一切从实际出发,一切从效果出发,一切从提高学生应用能力出发。编写的教材力求有所突破。如写作三部曲:① 范文;② 点评;③ 摹写。翻译技巧则采取了实例归纳法。3. 指导教与学。编写的教材力图改变以教师为中心的教学模式,扭转学生“等、靠、要”的学习习惯。如引导性会话环节,教师课前必须充分进行设计,学生也必须查阅资料,认真准备,不然教学就难以进行。

集约提高阶段的四部教材结构相同,但内容各异。其单元结构示意图如下:



三年级提高教材单元结构示意图



每单元后都有“讨论与实践”，但这只是建议，不作具体设计，供教师根据各自教学及学生实际，结合内容自行处理。

# 《21世纪高阶英语》

## 丛书编委会

主任：齐 涛 刘向信

副主任：宋承祥 陈国前

宋伯宁 卢福林

委员：(以姓氏笔画为序)

石运章 孙建奎 张志仁

张相铭 李小飞 姜泗平

栾述文 曾宪文 魏如尧

丛书主编：卢福林

## 本册编著者名单

主 编	徐文轩	张志仁	王爱哲
编 者	王凯军	郑静明	宋 隽
主 审	张法科		



# 目 录

## Contents

<b>Unit 1</b>	<b>Theses and Case Studies</b> .....	(1)
	Focus .....	(1)
	Part One Guided Speaking	
	<b>Greetings</b> .....	(1)
	Part Two Guided Reading	
	<b>Passage A</b>	
	<i>Let's, You and Me, Have a Little Discussion</i> .....	(2)
	<b>Passage B</b>	
	<i>On the Development of Humanities in Liberal Science-based Education</i> .....	(10)
	<b>Passage C</b>	
	<i>Cott Corporation—A Case Study</i> .....	(16)
	Part Three Writing Practice	
	<i>Job Application Letter</i> .....	(22)
<b>Unit 2</b>	<b>Famous Speeches</b> .....	(25)
	Focus .....	(25)
	Part One Guided Speaking	
	<b>Introduction</b> .....	(25)
	Part Two Guided Reading	
	<b>Passage A</b>	
	<i>Technology and Democracy</i> .....	(26)
	<b>Passage B</b>	
	<i>We Must Be Strong</i> .....	(32)
	<b>Passage C</b>	
	<i>The Four Freedoms</i> .....	(37)
	Part Three Writing Practice	
	<b>Public Speech</b> .....	(40)
<b>Unit 3</b>	<b>Computer Science</b> .....	(43)



Focus .....	(43)
Part One Guided Speaking	
<i>Phonecall</i> .....	(43)
Part Two Guided Reading	
<i>Passage A</i>	
<i>What's New in the Computer World</i> .....	(44)
<i>Passage B</i>	
<i>Bill Gates' Speech to Tsinghua University</i> .....	(48)
<i>Passage C</i>	
<i>The History of Computer and Its Types</i> .....	(52)
Part Three Writing Practice	
<i>Résumé</i> .....	(57)
<b>Unit 4 Corporation Organization and Operation</b> .....	(59)
Focus .....	(59)
Part One Guided Speaking	
<i>Making Plans</i> .....	(59)
Part Two Guided Reading	
<i>Passage A</i>	
<i>Organizing and Operating a Corporation</i> .....	(60)
<i>Passage B</i>	
<i>Plant Manager's Responsibility in Quality Control</i> .....	(65)
<i>Passage C</i>	
<i>Limited Companies</i> .....	(68)
Part Three Writing Practice	
<i>Joint Ventures</i> .....	(72)
<b>Unit 5 Examples of Successful Enterprises</b> .....	(76)
Focus .....	(76)
Part One Guided Speaking	
<i>Asking Directions</i> .....	(76)
Part Two Guided Reading	
<i>Passage A</i>	
<i>IBM—A World Leader</i> .....	(77)
<i>Passage B</i>	
<i>Haier Group: Innovation Yields Growth</i> .....	(83)
<i>Passage C</i>	
<i>The World's Largest Corporations</i> .....	(90)



	<b>Part Three Writing Practice</b>	
	<i>Invitation</i> .....	(94)
<b>Unit 6</b>	<b>Market Economy and Knowledge Economy</b> .....	(96)
	<b>Focus</b> .....	(96)
	<b>Part One Guided Speaking</b>	
	<i>Offering Help</i> .....	(96)
	<b>Part Two Guided Reading</b>	
	<b>Passage A</b>	
	<i>Sunshine and Showers</i> .....	(97)
	<b>Passage B</b>	
	<i>Knowledge Economy Is on the Way</i> .....	(102)
	<b>Passage C</b>	
	<i>CAS Launches Knowledge Innovation Program</i> .....	(106)
	<b>Part Three Writing Practice</b>	
	<i>Agenda/Itinerary</i> .....	(111)
<b>Unit 7</b>	<b>Material Science</b> .....	(113)
	<b>Focus</b> .....	(113)
	<b>Part One Guided Speaking</b>	
	<i>Ordering Meal</i> .....	(113)
	<b>Part Two Guided Reading</b>	
	<b>Passage A</b>	
	<i>Material Physics</i> .....	(114)
	<b>Passage B</b>	
	<i>High-Temperature Superconductors</i> .....	(124)
	<b>Passage C</b>	
	<i>The Age of Superstuff</i> .....	(128)
	<b>Part Three Writing Practice</b>	
	<i>Letter of Recommendation</i> .....	(131)
<b>Unit 8</b>	<b>Genome Project and Medical Science</b> .....	(133)
	<b>Focus</b> .....	(133)
	<b>Part One Guided Speaking</b>	
	<i>Shopping</i> .....	(133)
	<b>Part Two Guided Reading</b>	
	<b>Passage A</b>	
	<i>HGP: A Joint Effort to Benefit Mankind</i> .....	(134)
	<b>Passage B</b>	



	<i>What Causes Cancer?</i> .....	(142)
	<b>Passage C</b>	
	<i>The Puzzle of Hypertension in African-Americans</i> .....	(152)
	<b>Part Three Writing Practice</b>	
	<i>Letter of Congratulations</i> .....	(160)
<b>Unit 9</b>	<b>Networks and Information Technology</b> .....	(162)
	<b>Focus</b> .....	(162)
	<b>Part One Guided Speaking</b>	
	<i>Discussing Weather</i> .....	(162)
	<b>Part Two Guided Reading</b>	
	<b>Passage A</b>	
	<i>Wireless Networks</i> .....	(163)
	<b>Passage B</b>	
	<i>Why Businesses Are Using the Internet</i> .....	(168)
	<b>Passage C</b>	
	<i>The Internet via Cables</i> .....	(172)
	<b>Part Three Writing Practice</b>	
	<i>Letter of Thanks</i> .....	(175)
<b>Unit 10</b>	<b>Robots and Artificial Intelligence</b> .....	(177)
	<b>Focus</b> .....	(177)
	<b>Part One Guided Speaking</b>	
	<i>Making Comparison</i> .....	(177)
	<b>Part Two Guided Reading</b>	
	<b>Passage A</b>	
	<i>Robots Roll into Operating Rooms</i> .....	(178)
	<b>Passage B</b>	
	<i>Robotics in the 21st Century</i> .....	(184)
	<b>Passage C</b>	
	<i>Artificial Intelligence</i> .....	(188)
	<b>Part Three Writing Practice</b>	
	<i>Letter of Apology</i> .....	(192)
<b>Unit 11</b>	<b>City Planning and Environment Science</b> .....	(194)
	<b>Focus</b> .....	(194)
	<b>Part One Guided Speaking</b>	
	<i>Talking about a Film</i> .....	(194)
	<b>Part Two Guided Reading</b>	



	<b>Passage A</b>	
	<i>Building Smart-Growth Communities</i> .....	(195)
	<b>Passage B</b>	
	<i>We Don't Want a "Foggy London"</i> .....	(205)
	<b>Passage C</b>	
	<i>The Second Bottom Line</i> .....	(209)
	<b>Part Three Writing Practice</b>	
	<i>Letter of Complaint</i> .....	(213)
<b>Unit 12</b>	<b>Agriculture and Hydraulic Engineering</b> .....	(215)
	<b>Focus</b> .....	(215)
	<b>Part One Guided Speaking</b>	
	<i>Interview</i> .....	(215)
	<b>Part Two Guided Reading</b>	
	<b>Passage A</b>	
	<i>The Revival of Colored Cotton</i> .....	(216)
	<b>Passage B</b>	
	<i>Irrigating Crops with Seawater</i> .....	(223)
	<b>Passage C</b>	
	<i>The Three Gorges Project : the Ecology and Environment</i> .....	(230)
	<b>Part Three Writing Practice</b>	
	<i>Business Letters</i> .....	(235)
	<b>Key to Exercises</b> .....	(239)

# Unit 1 Theses and Case Studies



Guided Speaking	Guided Reading	Writing Practice
Greetings	Passage A: Let's, You and Me, Have a Little Discussion Passage B: On the Development of Humanities in Liberal Science-based Education Passage C: Cott Corporation—A Case Study	Job Application Letter

## Part One Guided Speaking

### ◎ Greetings

#### Formal Greetings

- A: Good morning.  
 B: Good morning. How are you today?  
 A: Just fine, thanks. How are you?  
 B: Wonderful. Things couldn't be better.

#### Informal Greetings

- A: Hi! How are you?  
 B: Fine, thanks. And you?  
 A: Just fine. Where are you going?  
 B: To the library.  
 A: OK. I'll see you later. So long.  
 B: So long.
- A: Hi. What's up?  
 B: Nothing much. What's new with you?



- A: Not too much. I've been pretty busy.  
B: Me too. Seems like all I do is to eat and sleep.  
A: Gotta go. Call me tonight.  
B: Okay. I'll call you later.

## Part Two Guided Reading

### ◎ Passage A

#### Let's, You and Me, Have a Little Discussion

by V. Light and P. Light

*computer mediated communication in support of camp-based university courses*

##### Introduction

Much of the research literature on the use of computer mediated communication (CMC) in higher education focuses on its potential to support distance learners who may never meet one another or their tutors. However, CMC is also increasingly being introduced, often alongside other computer-based supports for learning, in conventional campus-based courses. In this context, computer supported teaching and learning is frequently advocated as a way of dealing with growing numbers of students. Many tutors now have to deal with large tutorial groups and are coming to use computer-based resources as both an aid and a supplement to face-to-face meetings. Tutors are placing course materials on the worldwide web and establishing E-mail and conferencing systems as a basis of communication between themselves and their students. Some tutors are also setting up on-line course discussions to run alongside face-to-face tutorials. These electronic opportunities theoretically allow students to organise their own learning to suit their lifestyle. On-line, they can discuss course issues, develop their understanding through debate and be alerted to different interpretations and perspectives. The course topic can be kept alive and updated from one week to the next.

Light & Light (1999) describe one course where, as a supplement to course E-mail, the tutor extracted messages and contributions from students to create a Hypermail archive on the Internet. In this case the tutor played a key role both in structuring debate and as a resource provider. Warren & Rada (1998) suggest that this very active involvement of the tutor may be a necessary condition for productive interaction. However, CMC exchanges have also been held to be of value with much lower levels of tutor engagement. Thus, Durham (1990) suggests that student-student exchanges with low tutor involvement allow the creation of a very "immediate" environment for the exchange of information and for increasing some students' sensitivity to their own and others' writing. Durham describes stu-



dents resorting to a wide variety of approaches, from humour and fantasy to persuasion and appeal. This experience, he suggests, allowed them to learn about creating roles for themselves within their group (e.g. information seeker, compromiser and summariser).

Durham observed little response to abusive or ridiculous messages. However, Lea *et al.* (1992) found that such "flaming" contributions did take on an unwelcome permanence of existence, when compared to a similar spoken comment. This permanence heightened the impact of such remarks and led to a perception of there being more flaming than actually occurred.

Duffy *et al.* (1995) found that groups using CMC "developed a real sense of solidarity". It is not clear what effects pre-existing social groupings may have on electronic contributions. Spears & Lea (1992) rightly emphasise that, just because in CMC many social cues are excluded, one cannot assume that the "social dimension" is rendered irrelevant. Rather, learners have distinctive relationship histories, and these unobservable determinants are often difficult for researchers to tease out.

The research described here takes the form of a case study based on a third-year undergraduate course, in which the tutor set up group-based CMC discussion of a course-relevant topic but did not participate himself in any way in that discussion. This "virtual absence" of the tutor contrasted markedly with the situation observed by Light & Light (1999), though the course was similar in subject and level. Amongst the questions we sought to address were the following. How effectively, and by what means, will communications and exchange of ideas be achieved in this situation? How stable will such interaction be? If groups diverge in their patterns of interaction, what factors underlie this divergence? How, and how similarly, will students and the tutor judge the value of this experience?

The research was conducted in 1998 at a UK university. The focus was on student discussion supported via CMC in the context of a third-year optional unit on communication in an applied psychology and computing degree course. The 29 students (19 male, 10 female) attended weekly lectures for two terms. In the first term they also met fortnightly for practical workshops. In the second term, the workshops were replaced by on-line discussion. Prior to the start of this discussion the students familiarised themselves with the web-based communication environment, WebCrossing.

WebCrossing is an open system that is totally web-based. It has a distinctive contextualised message structure. All the contributions in a "thread" are presented together. The user does not have to open and close messages. In the tutor's view these features encourage "a kind of cut and thrust... a more fluent repartee". It was used as an unmoderated though supervised system, effectively run by the participants. As the tutor noted, there is nothing to stop students posting an out-of-thread message if they want to. He compares this with real life behaviour. "What characterises conversation is unpredictability and jumping about!"

In an initial interview the tutor stated that "a primary objective of the exercise is sim-



ply to give the students some live experience of computer mediated communication". He felt that he was giving his students "a chance to experience what it [CMC] was like". The tutor established four on-line discussion groups with membership corresponding with the prior workshop groups, and each consisting of seven or eight students. The original allocation to these groups was arbitrary; as the tutor put it, "no social engineering". The groups will be referred to here as A, B, C and D. The students' contributions to the web-based interaction contributed to the unit assessment. Assessment of the students' contributions was undertaken by the tutor, with independent moderation by a colleague. Nominally, 70% of the marks were allocated for quality of contribution and 30% for quantity; therefore, the students were advised to "think before you speak".

The basic format for the CMC activity was that the tutor posted an article for open discussion within each of the four groups. The original intention was to post several articles in succession. In the end, however, the tutor decided to restrict the CMC activity to two discussions. The first discussion centred on an essay posted on the web by Sara Pitman, a Simon Fraser University student. The essay was titled "From keyboards to human contact: love relationships through computer mediated communications" (Pitman, 1997). The essay, written in an informal style with Internet-based references to related literature, addresses the issues of computer mediated relationships. The students were originally given a 3-week deadline in which to make on-line contributions discussing this article. This original deadline was extended to 5 weeks. For the second discussion the groups were then asked, by the tutor, to evaluate, on-line, their own web-based discussions of the Pitman article. Given the focus of the unit, the students had had lectures about CMC and were thus aware of particular issues surrounding such communication.

### Method

The two researchers involved in data collection, one a previous-year graduate of the course in question, attended classes and got to know the students as a group before the CMC exercise began. Students were aware of the research objectives, were assured of confidentiality, and were willing participants in the various phases of the study. The two sequential on-line discussions in the four groups were monitored, and the length and frequency of the messages noted. The on-line transcripts themselves inevitably offered only a limited perspective on what was happening. To explore perspectives upon and perceptions of the on-line discussions, a number of group and individual interviews were conducted.

The content of the on-line exchanges was used to identify emergent themes and categories. Initially the two researchers looked at the on-line material separately. First, each researcher independently examined the transcript material for each group discussion, seeking to identify characteristics of the material both at the level of individual contributions and in terms of the relationships between contributions (e.g. agreement, disagreement, personal supportive, humour, provocation). The researchers then shared their initial analysis and

