

高等教育质量工程改革理工类教材



No lazy lips! No lazy lips!
No lazy lips! No lazy lips!

Please Speak

Teacher's Book II

教师用书 下册

理工科大学英语 口语教程

主编 张纹楨 江 滨



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图书在版编目(CIP)数据

理工科大学英语口语教程教师用书. 下/张纹楨, 江滨主编.

— 天津: 天津大学出版社, 2012.7

高等教育质量工程改革理工类教材

ISBN 978-7-5618-4393-2

I. ①理… II. ①张… ②江… III. ①英语—口语
—高等学校—教学参考资料 IV. ①H319.9

中国版本图书馆CIP数据核字(2012)第154589号

出版发行 天津大学出版社

出版人 杨欢

地址 天津市卫津路92号天津大学内 (邮编: 300072)

电话 发行部: 022-27403647 邮购部: 022-27402742

网址 publish.tju.edu.cn

印刷 天津泰宇印务有限公司

经销 全国各地新华书店

开本 185 mm×260 mm

印张 11

字数 357 千

版次 2012年8月第1版

印次 2012年8月第1次

印数 1-2000

定价 30.00元 (含光盘)

序

进入21世纪以来,随着我国经济的快速发展和改革开放的进一步深入,社会对大学生的英语水平提出了更高的要求;大学生们也迫切希望能尽快提高英语应用能力,以适应社会的需要。在此背景下,教育部于2007年7月正式颁布了《大学英语课程教学要求》(简称《课程要求》),将大学英语的教学目标确定为“培养学生的英语综合应用能力,特别是听说能力,使他们在今后工作和社会交往中能用英语有效地进行口头和书面的信息交流,同时增加其自主学习能力,提高综合文化素养,以适应我国社会发展和国际交流的需要”,意在进一步推动我国高等院校大学英语教学全方位的改革和教学质量的全面提升。

与此同时,作为我国高等教育质量工程改革的组成部分的大学英语教学改革如何适应高等教育发展的新形势,如何更有效地提高大学英语教学质量这一问题日益凸显出来。据统计,我国目前学习大学英语的学生约2 300万人。如此庞大的学习群体,分布在不同地区、不同层次的高校,其学习目的、学习动因、学习策略都存在很大差异。特别是,入学后学生的专业差异以及社会对不同专业人才的不同需求也体现出较大的差异性。面对如此多的差异性,传统的“固定教材+教师授课+学生听课”的封闭式教学模式显然已无法胜任。《课程要求》中也明确指出,大学英语课程设置“要充分体现个性化,考虑不同起点的学生……既要保证学生在整个大学期间的英语语言水平稳步提高,又要有利于学生个性化的学习,以满足他们各自不同专业的发展需要”。这就要求学校与教师真正做到以学生为中心,将“以人为本(Humanism)”的教育理念实实在在地融合到教学体系中。所有的学生都按照同一个目标、同一个要求、同一个进度开展大学英语教学的日子该结束了。

而教材在大学英语教学改革中处于中枢地位。大学英语的教学指导思想,就是通过大学英语教材得以贯彻执行的。从一定意义上讲,教材的设计模式很大程度上规定了课堂教学模式,而课堂教学模式又在很大程度上规定了学生的学习行为模式。因此,如何开发设计出一些以语言交互活动为中心而不是以语言知识为中心,以个性化

教学理念为内涵而不是以统一化教学理念为内涵的适合不同类别、不同层次高等院校学生的大学英语教材，是大学英语教学改革的当务之急。

《理工科大学英语口语教程》系列教材，针对理工类本科生英语教学的需求而设计，由天津大学文法学院多年从事非英语专业英语口语教学的老师们融合多年的教学经验，历尽几年的时间精心编写，并邀请外籍专家录制听力内容。教材特色如下。

1. 难易适中、针对性强

“教材多样性”是本教材开发核心理念。我们认为，大学英语教学，一方面应该根据学生入学时英语水平的差异采取分级教学，不同的级别采用难度不同的教材，从教材难易程度上体现多样性；另一方面还要根据学生各自不同专业的发展要求，采用更能体现其专业特色的英语教材，从教材内容上体现多样性。这样的教材设计在充分体现“个性化教学”的同时，也与《课程要求》所提出的课程设置“要充分体现个性化，考虑不同起点的学生”这一要求相吻合。

基于这样的理念，本套教材在设计之初就确定了上下册难度分级、循序渐进的编写思路。经过大范围充分调研理工类大学学生入学英语水平，我们摒弃了传统大学英语教材设计中由1级到4级的教材或者过于简单、或者又过于困难的弱点，针对大多数理工类学生入学英语水平在2~3级的特点进行教学安排和设计。同时，本套教材在内容上，覆盖了理工类大学绝大部分学科专业，结合社会对理工类人才英语水平的需求，强调理工特色，强调“因材施教”促进个体发展，力求将理工专业的英语日常生活化、科普化，积极调动学生学习的主观能动性。

2. 采用主题单元教学，开放性强、个性化程度高

本教材采用“聚焦学习者”的编写理念，即采用以学生为中心的主题单元教学模式。该理念充分体现了人本主义教学观，符合《课程要求》规定的关于大学英语这门课程“兼顾工具性和人文性”的性质，充分考虑“人”、“语言”和“社会”之间互为依存、互动促进的关系，力求实现英语综合运用能力的习得与学习者本人的人格发展和素质培养的有机结合。

为达到此目的，本教材具有以下一些要素。①生动有趣的主题及课文。每一个主题都与理工科大学生的性格形成和发展、参与社会活动和实现自我价值的人生历程密切相关。②有利于培养学生思考能力的愉悦的学习活动。引人入胜的主题，激发学生

欣然参与各种活动，加深对主题内涵的了解。在学生吸收大量的主题输入之后，再提出贴近生活的话题来讨论，激励学生谈出自己的见解和看法，参与性得到充分释放。

③为学生提供运用已有知识和技巧的各种学习机会。在各种学习活动中，与主题相关的词语、表达方式和句法结构会重复出现，不断地激活学生的记忆，以便存入学生的长久记忆库中，供其调用。

这种教学方式，强调以学生为中心，一方面要求学生由受外部刺激的被动接受者、知识的灌输对象转变为信息加工的主体和知识意义的主动建构者，另一方面要求教师由知识的传授者、灌输者转变为学生主动建构体系的帮助者、促进者。

3. 注重功能性及实用性

《理工科大学英语口语教程》系列教材分为学生用书及教师用书，教师用书为学生用书的配套参考用书，涵盖学生用书全部内容以及习题答案，并配有相关材料以供教师参考，同时配有全部听力原文。此外，教师用书配有光盘，供课堂教学使用。

期待本教材能够将我国理工类大学生英语口语能力培养工作推上一个新的台阶。

本书编写委员会

2012年5月

前言

大学英语教学是我国高等教育质量工程改革的一个重要组成部分。大学英语的教材建设是高等教育的一项重要基础工作。随着我国经济的迅猛发展，随着社会对理工类人才英语水平的要求日益提高，设计一套符合中国国情、适合理工类本科生的英语口语主干教材是大学英语教育质量工程改革的亮点。基于这一认识，天津大学文法学院多年从事非英语专业英语口语教学的老师们编写了这套口语教材，以期将我国理工类大学生的英语口语能力培养工作推上一个新的台阶。

本套教材在内容上覆盖了理工类大学绝大部分学科专业，并结合我国大学英语教学的实际情况与需要，强调理工特色，力求将理工专业的英语日常生活化、普及化。因此，本套教材不仅可以作为我国理工类或综合型高等院校大学英语口语教学的参考用书，也可作为大学英语后续课程的教材，为大学英语教育的可持续发展做一点贡献。

本套理工科口语教材分为上册和下册，与学生用书相配套有教师用书，供教师参考使用。教师用书配有光盘，包括学生用书中所用到的全部听力原文，由外籍专家 Holy Naylor（美国）和 Tony Kwan（加拿大）朗读。这套教材虽在正式出版前已在大学英语口语课程的教学过程中进行了部分尝试，但难免有疏漏之处，欢迎所有使用这套教材的师生提出宝贵意见。














在此套教材出版之际，我们向在编写过程中给予了大量支持和许多建设性意见的天津大学文法学院领导，向在教材内容的课堂尝试过程中与我们共同合作的诸位同仁和学生，向始终在默默地支持和奉献着的编者家属们表示由衷的敬意。离开你们任何一方，此套教材难以成型。感谢你们！

编者

2012年春于天津大学

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Unit 1

A New Visual Era



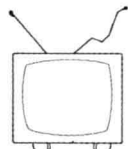
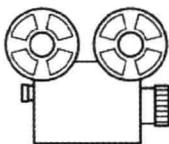
Task

1



A. Warm-up Activities

Directions: *Discuss the questions with your partner.*



- What do you know about 3D?
- What forms of entertainment can 3D be used in?
- Have you any experiences in 3D entertainment? What are they?
- How do you like the new visual era of 3D?



Teacher's Reference

- **What do you know about 3D?**

3D is the short form of 3-dimension. The latest generation of 3D traces its origins back more than 150 years. The basics have hardly changed since then, except for the emergence of the retro red-blue lenses in the 70s, that replaced the red-green glasses of yore.

Since each lens differs in color, each eye sees a slightly different image. In a similar way, our binocular vision gives us our sense of depth perception, as each eye sees objects at a distance from a slightly different perspective. When each eye is shown a slightly different image the brain automatically blends the images together producing the 3D effect.

3D involves creating two movies. A right eye movie and a left eye movie. And then in the theater, because you can wear those glasses arranging things so, that your right eye only sees the right eye movie and the left eye only sees the left eye movie. And then as far as your brain is concerned it is seeing the world with two eyes and puts everything together and then you see what the camera sees in three dimensions.

- **What forms of entertainment can 3D be used in?**

3D technology has found its way into movie productions, TV programs and video games as well.

- **Have you any experiences in 3D entertainment? What are they?**

I've seen a movie in 3D effect titled AVATAR. It was released in 2010 and proved a big success.

- **How do you like the new visual era of 3D?**

I will be more than happy to welcome the new visual era of 3D. This new technology will bring about major changes in people's daily entertainment.

B. Vocabulary

Directions: Look up the meanings of the following words and expressions.

silver screen	lens	celluloid	headgear
derivative	polarize	imprint	interweave
filter	Film Stock	fusion	Simul-Cam
projection	Technicolor	stereoscopic	Virtual Camera

Teacher's Reference

silver screen

n. a type of projection screen that was popular in the early years of the motion picture industry

derivative

n. something which has been developed or obtained from something else

filter

n. a device through which sound or light is passed and which blocks or reduces particular sound or light frequencies 滤光器

projection

n. the act of projecting a film onto a screen or wall

lens

n. a thin curved piece of glass or plastic used in things such as cameras, telescopes, and pairs of glasses

polarize

v. if something polarizes, two separate groups are formed with opposite positions

Film Stock

n. photographic film on which motion pictures are shot and reproduced 生胶片

Technicolor

n. a system of color photography used in making cinema films 彩色印片法

celluloid

n. celluloid is used to refer to films and the cinema 电影胶片

imprint

v. if a surface is imprinted with a mark or design, that mark or design is printed on the surface or pressed into it

fusion

n. something new that is created by joining them together 合成

stereoscopic

adj. of a picture, photograph, etc. that is made so that you see the objects in it with length, width, and depth when you use a special machine 立体的

headgear

n. something that is worn on a person's head

interweave

v. if two or more things are interwoven or interweave, they are very closely connected or are combined with each other

Simul-Cam

n. simulation-camera 模拟摄像机

Virtual Camera

n. 虚拟摄像机

Task 2



A. Discussion Questions

Directions: *Discuss the following questions with your partner.*

- What is 3D?
- When did the earliest 3D appear?
- What is the screen difference between 3D and 2D?
- How expensive is a 3D screen compared to a normal screen?
- Why must we wear special glasses for a 3D movie?



Teacher's Reference

- **What is 3D?**

3D is a three-dimensional picture that enhances the depth perception of the image, making the viewer feel much closer to the image than a regular film which is 2D.

- **When did the earliest 3D appear?**

The earliest 3D that has been known to exist was in 1890. But well-known movies only came into existence in 3D by the year 1950.

- **What is the screen difference between 3D and 2D?**

2D is totally flat, like what a TV is. 3D makes everything whole, things

have depth, and they're more rounded. It's like watching a play, with live action people.

3D works on a silver screen which has a reflection gain of 2.4 which means if X amount of brightness is thrown on the screen, the reflected light level is 2.4X. This means that the screen is much brighter. The reason why this screen was known as silver screen was because its paint was created from a derivative of silver.

- **How expensive is it compared to a normal screen?**

Silver screen is technically three times more expensive than normal screens.

- **Why must we wear special glasses for a 3D movie?**

In any 3D system, there is a passive polarized filter in front of the projection lens. You only get the 3D effect when you wear polarized glasses whose polarization is the same as the filter. Without the 3D glasses, one cannot get 3D depth.

B. Listen to Find Out

Directions: Listen to the conversation between Michael, a 3D engineer and an interviewer. Supply the missing words.

Michael: 3D enhances the depth perception of the image.

Michael: The earliest 3D that has been known to exist was in 1890.

Michael: 3D works on a silver screen that is much brighter.

Michael: Silver screen is technically three times more expensive than normal screens.

Michael: Without the 3D glasses, one cannot get 3D depth.



Audio Script

Interviewer: 3D is becoming so popular recently. So Michael, as a 3D engineer, can you explain what 3D is?

Michael: Ok. 3D is a three-dimensional picture that enhances the depth perception of the **image**, making the viewer feel much closer to the image than a regular film which is 2D.

Interviewer: When did the earliest 3D appear?

Michael: Well, believe it or not, the earliest 3D that has been known to exist was in **1890**. But well-known movies only came into existence in 3D by the year 1950.

Interviewer: That's a long history! And my next question is: What is the screen difference between 3D and 2D?

Michael: 3D works on a silver screen which has a reflection gain of 2.4 which means if X amount of brightness is thrown on the screen, the reflected light level is 2.4X. This means that the screen is much **brighter**.

Interviewer: Why is the screen known as silver screen? Is it because of the color or anything else?

Michael: That is because its paint was created from a derivative of silver.

Interviewer: How expensive is a silver screen compared to a normal screen?