



21世纪信息传播专业英语系列教材

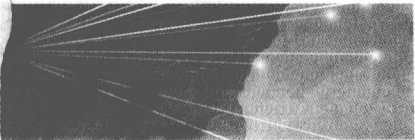
# 教育技术学专业英语

吴军其 严莉 / 主编

ENGLISH FOR EDUCATIONAL TECHNOLOGY



北京大学出版社  
PEKING UNIVERSITY PRESS



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# 教育技术学专业英语

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吴军其 严 莉 / 主 编

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## 内 容 简 介

本书的主要目的是使学生掌握教育技术学专业英语术语及用法, 培养和提高学生阅读和翻译专业英语文献资料以及用英语进行学术交流的能力。全书包括专业英语基础篇与应用篇两部分, 其中基础篇由 20 个单元组成, 涵盖教育技术领域的主要分支和实践领域, 主要内容包括: 教育技术学、教育技术学的历史和理论基础、传播理论、系统理论、信息与传播技术、教学系统设计、开发学习资源、远程教育、教学评价等内容, 都是精选国外的经典文献。每个单元由知识目标、专业词汇、2~4 篇课文、新单词、课文注释、其中一篇课文的参考翻译及练习这七个部分组成。同时为了方便教学, 应用篇系统地介绍了科技论文的结构、写作与投稿等问题, 归纳了中国学生撰写英文科技论文中常见的错误, 最后总结了常用应用文写作的要求与规范, 并给出了一些实际的范例。

本书可作为教育技术学专业本科生和研究生的专业英语、文献研究、双语课程的教材, 也可供从事相关专业的人员参考使用。

## 前 言

教育技术学的飞速发展正在影响着教育的各个领域,并成为教育深化改革的突破口和制高点,它与素质教育、教育信息化、教育创新、创新人才培养、促进终身学习体系的建立等重大问题紧密相关,因此,从业人员必须通过不断学习专业英语,来迅速掌握教育技术学的新理论知识与新技术。为进一步提高教育技术学本科生和研究生的专业英语能力,促进人才的高层次培养,我们撰写了这本教材。选材的原则如下:

(1) 语言的规范性与纯正性。本书中的课文选自国外的经典文献,包括国际权威网站和经典论文。

(2) 专业知识的广泛性与先进性。选材综合选取了信息与传播技术、教学系统设计、开发学习资源、在线学习、远程教育、教学评价等内容,使读者在学习科技英语的同时也了解教育技术学的最新发展动态。

(3) 专业知识的全面性。本书不仅重点强调了科技文献的“读”,也对“写”与口头表达作了尝试,同时还系统地阐述了科技论文的写作、投稿与应用文写作。

(4) 专业知识的扩展性。教育技术学是一门知识更新极快的专业,因此学生必须了解本专业的最权威期刊,掌握科技文献的查阅方法。

此外,本书还针对同类型教材的不足,结合作者多年来的实际工作经验与学术交流的体会,补充了 Internet 上常用的教育技术文献资源。

学生学习本书后,能熟悉和掌握大量教育技术专业英语的常用词汇和术语,提高阅读和理解原始的专业英语文献的能力,了解本专业里的一些新的理论知识与技术,从而增强国际交流能力。

由于经验不足,加之作者水平有限,书中的疏漏之处在所难免,敬请读者批评指正,以便进一步改进和充实我们的工作。

编者

2009年8月

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注:本书各单元习题参考答案见教育出版网( [www.jycb.org](http://www.jycb.org) )。

## Part 1 The Outline of Educational Technology

### Unit 1 The Basic Concepts of Educational Technology

#### ▲ Knowledge Objectives

When you have completed this unit, you will be able to:

- ◆ Define educational technology
- ◆ Identify the differences and similarities of the two versions of the definition
- ◆ State the perspectives and meaning of educational technology
- ◆ List the types of research methods and approaches

#### ▲ Professional Terms

educational technology	教育技术
instructional technology	教学技术
instructional systems design	教学系统设计
audiovisual technology	视听技术
human performance technology	人类绩效技术
cognitive psychology	认知心理学
formative evaluation	形成性评价
summative evaluation	总结性评价
AECT	教育传播与技术协会
design	设计
development	开发
utilization	运用
management	管理
evaluation	评价
quantitative	定量的
qualitative	定性的

## Text A

What is Educational Technology?<sup>①</sup>

“Educational technology” is a term widely used in the field of education (and other areas), but it is often used with different meanings. The word “technology” is used by some to mean “hardware”—the devices that deliver information and serve as tools to accomplish a task, but those working in the field use “technology” to refer to a systematic process of solving problems by scientific means (Figure 1-1).<sup>[1]</sup>

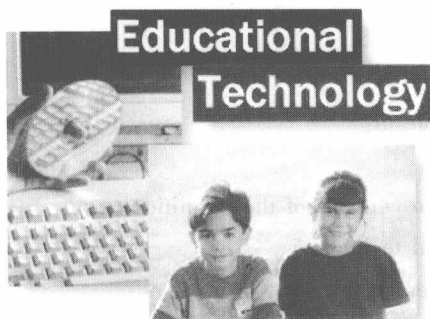


Figure 1-1 Educational technology means not only hardware, but also educators' thoughts, experience techniques, etc.

In 1994, the definition of the field has been published by the Association for Educational Communications and Technology (AECT): “Instructional Technology is the theory and practice of design, development, utilization, management and evaluation of processes and resources for learning.” (Seels & Richey)

The 1994 definition is built upon five separate areas of concern to instructional technologists: Design, Development, Utilization, Management, and Evaluation, which are five areas of study and practice within the field. In the book, *Instructional Technology: The Domains and Definitions of the Field*, the authors present the domains and sub-domains of the field (Figure 1-2).

With the development of educational technology, the definition continues to evolve. In 2004, AECT defines educational technology as follows: “Educational technology is the study and ethical practice of facilitating learning and improving performance by creating, using and managing appropriate technological processes and resources.” The term educational technology is often associated with, and encompasses, instructional theory and learning theory. While instructional technology covers the processes and systems of learning and instruction, educational technology also includes other systems used in the process of developing human capability.

## Text B

Perspectives and Meaning of Educational Technology<sup>②</sup>

Educational technology is most simply and comfortably defined as an array of tools that might prove helpful in advancing student learning.<sup>[2]</sup> Educational technology relies on a broad definition of the word “technology” (Figure 1-3). Technology can refer to material objects of

① [http://www.ifets.info/journals/8\\_3/10.pdf](http://www.ifets.info/journals/8_3/10.pdf)

② [http://en.wikipedia.org/wiki/Educational\\_technology](http://en.wikipedia.org/wiki/Educational_technology)

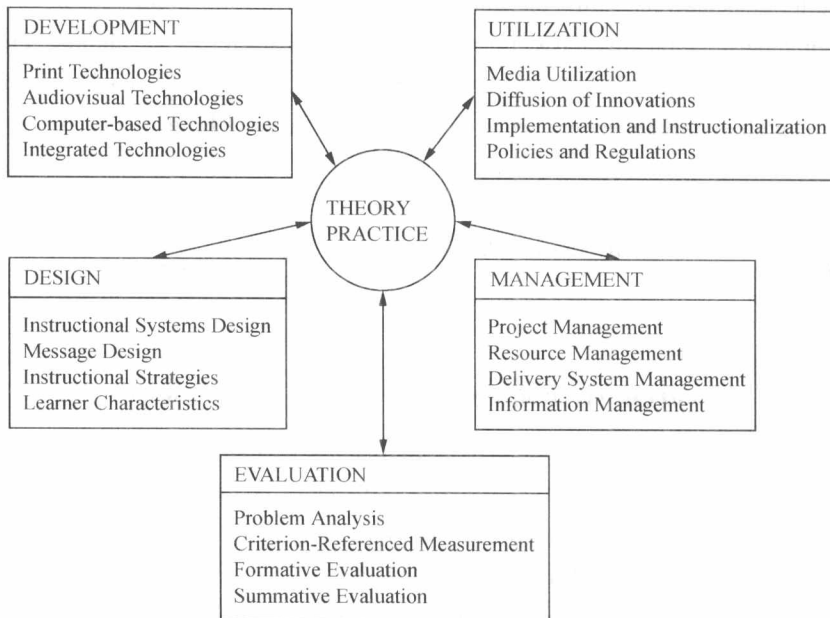


Figure 1-2 The domains of instructional technology

use to humanity, such as machines, hardware or utensils, but it can also encompass broader themes, including systems, methods of organization, and techniques. Those who employ educational technologies to explore ideas and communicate means are learners or teachers.

Consider the Handbook of Human Performance Technology. The word technology for the sister fields of Educational and Human Performance Technology means “applied science”. In other words, any valid and reliable process or procedure that is derived from basic research using the “scientific method” is considered a “technology”.<sup>[3]</sup> Educational or Human Performance Technology may be based purely on algorithmic or heuristic processes, but neither necessarily implies physical technology. The word technology comes from the Greek “Techne” which means craft or art. Another word “technique”, with the same origin, also may be used when considering the field Educational technology. So educational technology may be extended to include the techniques of the educator. A classic example of an Educational Technology is Bloom’s 1956 book, *Taxonomy of Educational Objectives*.

According to some, an Educational Technologist is someone who transforms basic educational and psychological research into an evidence-based applied science (or a technology) of learning or instruction.<sup>[4]</sup>

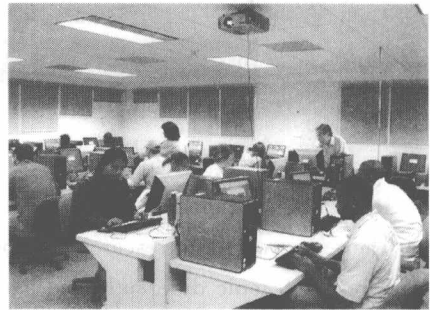


Figure 1-3 Educational technology is widely used in all kinds of fields.

But the term seems very stuffy and almost arrogant to those who work with the tools. Educational Technologists typically have a graduate degree (Master's, Doctorate, Ph. D., or D.Phil.) in a field related to educational psychology, educational media, experimental psychology, cognitive psychology or, more purely, in the fields of Educational, Instructional or Human Performance Technology or Instructional (Systems) Design. But few of those listed above as theorists would ever use the term "educational technologist" as a term to describe themselves, preferring less stuffy terms like educator.

## Text C

### Research Methods of Educational Technology<sup>①</sup>

In research, selecting the best strategy to approach a particular research topic or question is half the battle. Research can be classified or defined in many different ways. In order to pick the appropriate techniques, it's essential to know what types and methods are available.

#### Types of Research: From Basic to Applied

Research can be classified by the degree of direct applicability of the research to educational practice or settings. It can range from basic research (focused on developing or enhancing theory) to applied research (conducted to solve current educational problems) (Figure 1-4).



Figure 1-4 Types of research spectrum

#### Research Methods: Quantitative and Qualitative

There are two basic research methods: quantitative and qualitative. Each method approaches a research topic differently and each consists of multiple approaches.

Quantitative research is very traditional and is adopted from the natural sciences. It relies on the belief or assumption that our world and the claims about it are not considered meaningful unless they can be verified through direct observation.<sup>[5]</sup>

Qualitative research, on the other hand, is fairly new and is based on different beliefs. In qualitative research, all meaning is tied to perspective or context, so there is typically never one right answer. The table which follows tabulates the many differences between the two methods of inquiry (Table 1).

① <http://coe.sdsu.edu/eet/articles/methodsofinq/index.htm>

Table 1 Characteristics of the Research Methods

Characteristics	Quantitative Research	Qualitative Research
<b>Purpose</b>	To generalize about or control phenomena	To provide in-depth descriptions of settings and people
<b>Reasoning Method</b>	Primarily Deductive: Specific predictions based on general observations, principles, or experiences	Primarily Inductive: Generalization based on specific observations and experiences
<b>Hypothesis</b>	Identified prior to research, purpose of research is to test it	Begins with guiding research questions, which will be refined during data collection and analysis
<b>Nature</b>	More narrowly focused and outcome oriented	Holistic and process oriented
<b>Design</b>	Clear, well-ordered sequence of steps	Flexible and changeable during research
<b>Interaction with Context</b>	Tries to eliminate the influence of contextual variables	Tries to capture the richness of the context of the subjects and their perspectives
<b>Data Collection</b>	Primarily numerical data gathered through paper-and-pencil, non-interactive instruments (can also include narrative data)	Primarily narrative data, collected from fieldwork (can also include numerical data)

### Research Approaches: Complementary vs. Oppositional

Choosing the most appropriate strategy or strategies allows the researcher to design the most effective framework to better understand his/her research topic or question. Approaches fall under one of the two methods described above.

Quantitative methods tend to gather numerical data, while qualitative methods tend to gather narrative, non-numerical data. Although these methods sound oppositional, they are in fact complementary (Figure 1-5), and the approaches or strategies from each can be used together in order to better explore a research topic.

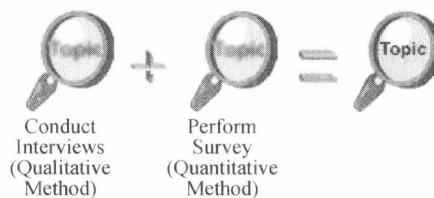


Figure 1-5 The effects of quantitative and qualitative are shown in the equation.

### The (Interactive) Research Tree

The types of, methods of, and approaches to research are represented below (Figure 1-6):

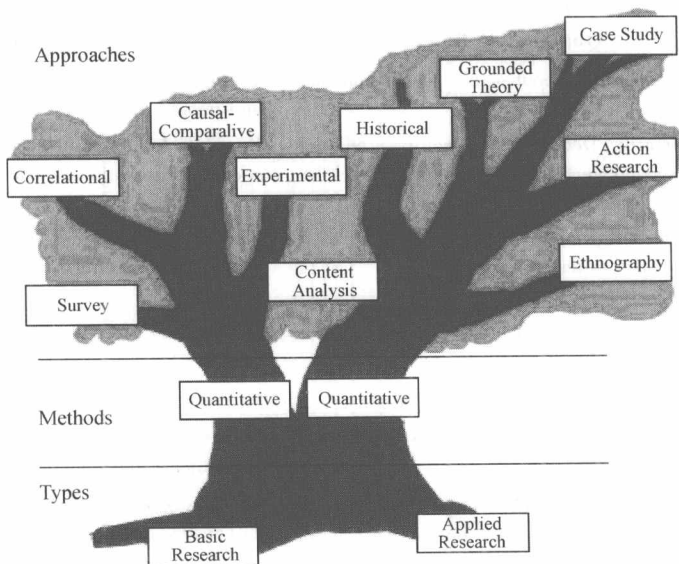


Figure 1-6 Interactive research tree

## New Words

systematic *adj.* 系统的,体系的

evolve *vt., vi.* (使)发展,(使)进展,(使)进化

ethical *adj.* 1. 伦理的;道德的 2. 合乎道德的

encompass *vt.* 围绕;包围

stuffy *adj.* 1. 空气不好的,通风不好的,闷热的 2. (观点、举止)陈腐的,呆板的,拘谨的

arrogant *adj.* 傲慢的,自大的

oppositional *adj.* 反对的,对抗的

complementary *adj.* 互补的

## Notes

[1] The word “technology” is used by some to mean “hardware”—the devices that deliver information and serve as tools to accomplish a task—but those working in the field use “technology” to refer to a systematic process of solving problems by scientific means.

译文:一些人运用“技术”这个单词来表示“硬件”——一种传递信息的设备并作为完成一项任务的工具,但那些教育技术行业内人运用“技术”来指代通过科学手段来解决问题的系统过程。

- The devices that deliver information and serve as tools to accomplish a task 作为 hardware 的同位语从句,其中的 that 从句又作为 devices 的定语从句,用来解释说明 devices。
- Working in the field 是现在分词做定语,修饰限定 those。
- refer to 查阅,提到,谈到,打听,涉及,认为与……有关,认为……起源于……,参考

[2] Educational technology is most simply and comfortably defined as an array of tools that might prove helpful in advancing student learning.

译文:教育技术可以最简便而充分地被定义为一系列能够在促进学生学习方面起作用的工具。

- ◆ That might prove helpful in advancing student learning 是定语从句,修饰先行词。
- ◆ an array of 一排,一群,一批

[3] In other words, any valid and reliable process or procedure that is derived from basic research using the “scientific method” is considered a “technology.”

译文:换而言之,任何有根据的、可靠的过程或程序,即源自使用“科学方法”的基础研究的过程或程序,被称做“技术”。

◆ That is derived from basic research using the “scientific method” 作定语从句,修饰先行词 process or procedure,其中 using the “scientific method”是现在分词作后置定语,修饰 basic research。

- ◆ be derived from 源自

[4] According to some, an Educational Technologist is someone who transforms basic educational and psychological research into an evidence-based applied science (or a technology) of learning or instruction.

译文:根据一些人的说法,一个教育技术家是将基本的教育、心理研究转换成以事实为基础的有学习或教学的应用科学(或技术)。

◆ Who transforms basic educational and psychological research into an evidence-based applied science (or a technology) of learning or instruction 整个句子作定语从句,修饰先行词 someone。

- ◆ According to 根据
- ◆ Transform... into 转换成……

[5] It relies on the belief or assumption that our world and the claims about it are not considered meaningful unless they can be verified through direct observation.

译文:定量研究建立在这样的信念或假设之上:除非我们的世界和对世界的看法能通过直接的观察来验证,否则它们并不是有意义的。

◆ That our world and the claims about it are not considered meaningful unless they can be verified through direct observation 是同位语从句,修饰先行词 the belief or assumption。

- ◆ unless 除非
- ◆ rely on *v.* 依赖,依靠

## Selected Translation

### Text A

#### 教育技术是什么

“教育技术”这个术语在教育领域(还有其他领域)被广泛运用,但通常被理解成不



同的含义。一些人运用“技术”这个单词来表示“硬件”——一种传递信息的设备并作为完成一项任务的工具,但那些教育技术行内人运用“技术”来指代通过科学手段来解决问题的系统过程。

在1994年,美国教育传播与技术协会发表了该领域的定义:“教育技术是设计、开发、运用、管理和评价学习过程、学习资源的理论与实践。”

1994定义建立在教学技术专家所关心的五个独立的专门领域——设计、开发、运用、管理与评价——之上。在《教育技术:领域的定义与范畴》中,作者给出了这个领域的范畴及其子范畴。(见图1)

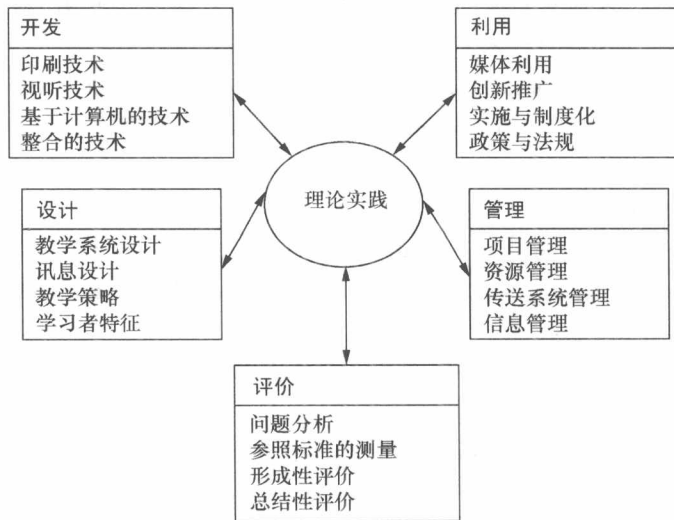


图1 教学技术的范畴

随着教育技术的发展,其定义继续演化。在2004年,美国教育传播与技术协会将教育技术定义如下:教育技术是通过创建、使用、管理合适的技术过程和资源来促进学习、提高绩效的理论和合乎伦理道德的实践。教育技术这个术语通常与教学理论和学习理论相联系,并包括了教学理论和学习理论。教学技术涉及的是学习和教学的过程和系统,而教育技术则包括在发展人类能力的过程中所使用的其他系统。

## Exercises

### 1. Please Explain the Following Professional Terms:

- (1) audiovisual technology
- (2) Human Performance Technology (HPT)
- (3) Instructional Systems Design (ISD)
- (4) AECT
- (5) cognitive psychology

### 2. Short Answers:

- (1) In the AECT's definition in 1994, what domains does educational technology include?