



21世纪全国高等院校物流专业创新型应用人才培养规划教材

物流英语

主 编 阎功俭

副主编 姜 宝 张媛媛

English



LOGISTICS



北京大学出版社
PEKING UNIVERSITY PRESS

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内 容 简 介

本书力求通过对物流理论知识的介绍以及物流案例的解析来提高读者的专业英语阅读能力,同时通过物流运作中的单证往来和信息传递等章节提高读者的专业英语实际应用能力和创新思维能力。本书在每章都安排了具有针对性的习题,帮助读者迅速、准确地把握该章的基本内容并拓展思路。附录部分全面地介绍了世界知名物流企业的发展历程、业务范围与经营理念,希望能够开拓读者视野、激发学习兴趣、端正择业观念。

本书可作为普通高等院校物流管理和工商管理等专业教材和参考用书,也可作为各类工商企业国际商务与国际物流管理人员的培训参考用书。

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举报电话: 010-62752024

电子邮箱: fd@pup.pku.edu.cn

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前 言

物流学自 20 世纪初产生以来在世界范围内受到广泛重视并得到迅速发展,是一门由经济学、管理学、工学和理学等互相交叉形成的新兴学科。随着我国经济体制改革的深入和经济全球化的发展,物流成为国民经济的重要产业和新的经济增长点。作为具有全球视野的目前的和未来的物流从业者,专业英语水平成为制约其职业发展的重要因素。目前市面上已经有一些此类图书,但是在提高读者的阅读能力和实际应用能力方面结合得并不好。本书力求将两者结合在一起,通过对物流理论知识的介绍、物流案例的解析来提高读者的专业英语阅读能力,同时通过物流运作中的单证往来和信息传递等章节提高读者的专业英语实际应用能力和创新思维能力。编者结合多年的国际物流专业英语和其他物流双语课程的教学实践,力争呈现给读者一本结构清晰、内容丰富、可读性强的物流专业英语教材。

同以往的物流英语教材相比,本教材具有以下特色。

(1) 结构清晰,学生易于学习掌握,教师易于引导和教学。

(2) 注释充分,可读性强。

(3) 专业术语涵盖面广,实用性强,便于读者查阅。

(4) 精选的物流案例与分析提示有助于启发读者思维,提高专业英语表达能力与综合应用能力。

(5) 每章的学习目标与同步思考题有助于读者迅速、准确地把握该章的基本内容并拓展思路。

(6) 附录部分全面介绍了世界知名物流企业的发展历程、业务范围与经营理念,希望能够开拓读者视野、激发学习兴趣、端正择业观念。

本书可作为普通高等院校物流管理和工商管理等专业教材和参考用书,也可作为各类工商企业国际商务与国际物流管理人员的培训参考用书。全书共分 9 章,具体编写分工如下。李剑:第 1 章;阚功俭、陈婷婷、张海燕:第 2 章、第 3 章、附录;姜宝,李剑:第 4 章;张媛媛:第 5 章、第 8 章、第 9 章;姜宝:第 6 章;阚功俭、张媛媛、陈婷婷:第 7 章;陈婷婷、张海燕、王玉凤参与修改了第 1 章、第 2 章、第 3 章、第 4 章、第 6 章、第 7 章以及附录的部分内容。阚功俭、姜宝、张媛媛负责全书的结构设计,阚功俭负责最后的统稿、定稿,阚功俭担任主编,姜宝、张媛媛担任副主编。

本书在编写过程中参考了国内外同行的有关研究成果和文献,在此特向这些作者表示衷心的感谢!

由于物流英语涵盖范围很广,物流的理论和实践都处在不断发展和探索过程中,尽管我们为编写本书付出了巨大的努力,但由于水平有限,书中难免存在疏漏之处,恳请广大读者批评指正。

编 者

2010 年 1 月

丛书总序

物流业是商品经济和社会生产力发展到较高水平的产物，它是融合运输业、仓储业、货代业和信息业等的复合型服务产业，是国民经济的重要组成部分，涉及领域广，吸纳就业人数多，促进生产、拉动消费作用大，在促进产业结构调整、转变经济发展方式和增强国民经济竞争力等方面发挥着非常重要的作用。

随着我国经济的高速发展，物流专业在我国的发展很快，社会对物流专业人才需求逐年递增，尤其是对有一定理论基础、实践能力强的物流技术及管理人才的需求更加迫切。同时随着我国教学改革不断深入以及毕业生就业市场的不断变化，以就业市场为导向，培养具备职业化特征的创新型应用人才已成为大多数高等院校物流专业的教学目标，从而对物流专业的课程体系以及教材建设都提出了新的要求。

为适应我国当前物流专业教育教学改革和教材建设的迫切需要，北京大学出版社联合全国多所高校教师共同合作编写出版了本套《21世纪全国高等院校物流专业创新型应用人才培养规划教材》。其宗旨是：立足现代物流业发展和相关从业人员的现实需要，强调理论与实践的有机结合，从“创新”和“应用”两个层面切入进行编写，力求涵盖现代物流专业研究和应用的主要领域，希望以此推进物流专业的理论发展和学科体系建设，并有助于提高我国物流业从业人员的专业素养和理论功底。

本系列教材按照物流专业规范、培养方案以及课程教学大纲的要求，合理定位，由长期在教学第一线从事教学工作的教师编写而成。教材立足于物流学科发展的需要，深入分析了物流专业学生现状及存在的问题，尝试探索了物流专业学生综合素质培养的途径，着重体现了“新思维、新理念、新能力”三个方面的特色。

1. 新思维

(1) 编写体例新颖。借鉴优秀教材特别是国外精品教材的写作思路、写作方法，图文并茂、清新活泼。

(2) 教学内容更新。充分展示了最新最近的知识以及教学改革成果，并且将未来的发展趋势和前沿资料以阅读材料的方式介绍给学生。

(3) 知识体系实用有效。着眼于学生就业所需的专业知识和操作技能，着重讲解应用型人才培养所需的内容和关键点，与就业市场结合，与时俱进，让学生学有所用，学而能用。

2. 新理念

(1) 以学生为本。站在学生的角度思考问题，考虑学生学习的动力，强调锻炼学生的思维能力以及运用知识解决问题的能力。

(2) 注重拓展学生的知识面。让学生能在学习到必要知识点的同时也对其他相关知识有所了解。

(3) 注重融入人文知识。将人文知识融入理论讲解，提高学生的人文素养。

3. 新能力

(1) 理论讲解简单实用。理论讲解简单化,注重讲解理论的来源、出处以及用处,不做过多的推导与介绍。

(2) 案例式教学。有机融入了最新的实例以及操作性较强的案例,并对案例进行有效的分析,着重培养学生的职业意识和职业能力。

(3) 重视实践环节。强化实际操作训练,加深学生对理论知识的理解。习题设计多样化,题型丰富,具备启发性,全方位考查学生对知识的掌握程度。

我们要感谢参加本系列教材编写和审稿的各位老师,他们为本系列教材的出版付出了大量卓有成效的辛勤劳动。由于编写时间紧、相互协调难度大等原因,本系列教材肯定还存在不足之处。我们相信,在各位老师的关心和帮助下,本系列教材一定能不断地改进和完善,并在我国物流专业的教学改革和课程体系建设中起到应有的促进作用。

齐二石
2009年10月

齐二石 本系列教材编写指导委员会主任,博士、教授、博士生导师。天津大学管理学院院长,国务院学位委员会学科评议组成员,第五届国家863/CIMS主题专家,科技部信息化科技工程总体专家,中国机械工程学会工业工程分会理事长,教育部管理科学与工程教学指导委员会主任委员,是最早将物流概念引入中国和研究物流的专家之一。

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Chapter 1 Introduction to Logistics Management



Learning Objectives

After reading this chapter, you will be able to:

- Understand the brief origins and history of logistics conception development.
- Learn the definition and boundary of logistics.
- Gain an understanding of competitive advantage through logistics management.
- Understand the mission of logistics.
- Learn the factors changing logistics environment.
- Get an overview of the changing logistics environment and the new rules of logistics competition.
- Get an overview of the logistics network of the 21st century.

1.1 What is Logistics

In the early part of 1991 the world was given a dramatic example of the importance of logistics. However, the term “logistics” comes from the military.

1.1.1 Brief History of Logistics Emergence

Logistics, logistics management, and supply chain management are not new ideas. From the building of the pyramids to the relief of hunger in Africa, the principles underpinning^① the effective flow of materials and information to meet the requirements of customers have altered little.

物流、物流管理和供应链管理都不是新概念了。从非洲建造金字塔到饥荒救济，那些支撑有效的物资流和信息流从而满足顾客需求的原则正悄然改变。

The history of mankind was present logistics strengths and capabilities. In the American War of Independence, the British were defeated because they could not feed their 12 000 troops from faraway Britain without any capable supplying organization.

In the Second World War logistics also played a major role. The Allied Force’s invasion of Europe was a highly skilled exercise in logistics, as was the defeat of Rommel in the desert. Rommel himself once said that “... before the fighting proper, the battle is won or lost by quartermaster”. However, whilst the Generals and Field Marshals from the earliest times have understood the critical role of logistics, strangely it is only in the recent past that business organizations have come to recognize the vital impact that **logistics management** can have in the achievement of competitive advantage. Partly this lack of recognition springs from the relatively low level of understanding of the benefits of **integrated logistics**. It is paradoxical^② that it has taken almost 100 years for these basic principles of logistics management to be widely accepted.

1.1.2 Origins and Definition of Logistics

The term “logistics” originates from the ancient Greek “logos”—ratio, word, calculation, reason, speech, oration. In ancient Greek, Roman and Byzantine empires, there were military officers with the title “Logistikas” who were responsible for financial and supply distribution matters.

Military logistics

Originally, logistics is a military term, first used in the Napoleonic era. Logistics, as a military term, is defined as “the art of moving armies and keeping them supplied”. The term has become popular since the Gulf War of 1991, particularly since the publication in November, 1992 of an interview with William Pagonis, the general who had been in charge of logistics in

① underpin v. 巩固，支撑

② paradoxical adj. 荒谬的

that war. William Pagonis defines it as:

“the integration of transportation, supply, warehousing, maintenance, procurement, contracting and automation into a single function that ensures no suboptimization in any of those areas, to allow the overall accomplishment of a particular strategy, objective, or mission.”

(物流)就是将运输、供给、仓储、维护、购买、订约以及自动控制等功能综合为一体，取消局部最优，保证整体特定战略、目标与任务的实现和完成。

While Pagonis's accomplishments in the field deserve the highest respect, his definition mixes the description of *what* a function is with how it should be performed. However, without integration and automation, and with suboptimization, his list of functions would still presumably^① comprise logistics. In essence, what all these functions add up to is all military operations except combat.

According to Webster's encyclopaedic^② dictionary, it designate

“the branch of military science and operations dealing with the procurement, supply, and maintenance of equipment, and hospitalization of personnel, with the provision of facilities and services, and with related matters.”

The reference to *related matters* unfortunately opens this definition to multiple interpretations. In business, a commonly used definition for logistics in business is given by **the Council for Logistics Management (CLM)**:

“Logistics is that part of the supply chain process that plans, implements, and controls the efficient, effective forward and reverse flow and storage of goods, service, and related information between the point of origin and the point of consumption in order to meet customers' requirements.”

While this definition carries the authority of a professional society, it is difficult to sue for the following reasons.

- If logistics is defined as “part of the supply chain process”, then the “supply chain process” also needs to be defined.
- This definition appears to exclude the possibility that logistics could be done in an ineffective or inefficient manner.
- Listing goods, services, and related information appears to exclude flows of money from consideration.
- The emphasis placed on meeting customers' requirements in the definition is unnecessary and may lead the reader away from the many possible improvements in logistics that are not directly related to customers.

In “Supply Chain Strategy”, Frazelle gives the following definition:

“Logistics is the flow of material, information and money between consumers

① presumably *adv.* 大概，推测起来

② encyclopaedic *adj.* 百科全书的

and suppliers”.

While his definition is crisper^① and clearer than the CLM's, it has the following shortcomings.

- It is too broad in that it appears to encompass production itself. Work-pieces flow through milling machines, but cutting metal is not part of logistics.
- It is too narrow in that it does not include services. Getting passengers on and off a plane, for example, does not fit this definition, unless you agree that people are a special case of materials.
- The reference to consumers, as opposed to customers, is puzzling, because it restricts the discussion to consumer goods, to the exclusion of capital goods, whose end users, by definition, are not consumers.

So far, many definitions of logistics have been proposed. What is logistics management in the sense that it is understood today? There are many ways of defining logistics but the underlying concept might be defined as:

物流是整个组织机构从战略上通过市场渠道管理购买、物资运输与存储、成品和部件库存的过程，通过完成有成本效益的订单以确保当前和未来收益达到最大化。

Logistics is the process of strategically managing the procurement, movement and storage of materials, parts and finished inventory (and the related information flows) through the organization and its marketing channels in such a way that current and future profitability are maximized through the cost-effective fulfillment of orders.

This basic definition will be extended and developed as the logistics practice progresses, but it makes an adequate starting point.

Good to know

The first objective of logistics is to deliver the right materials to the right locations, in the right quantities, and in the right presentation; its second, to do all of it efficiently.

1.1.3 Recognizing the Boundary of Logistics

In manufacturing, logistics includes the following.

- **Material flows:** Shipping, transportation, receiving, and storage and retrieval between plants and between production lines within a plant.
- **Information flows:** Transaction processing associated with the material flow, analysis of past activity, forecasting, planning, and scheduling future activity.
- **Funds flows:** Payments triggered the movements of goods and information.

Logistics encompasses everything that happens outside the factory walls, as seen in Figure 1.1.

① crisp *adj.* 简洁的

The plant sees materials come in/from a network of suppliers and products go out to a distribution network. What happens inside each of these networks affects the plant, but is often not visible to its management beyond the first tier^①. Allowing each plant to know more about both its suppliers' suppliers and its customers' customers is a stated objective of supply chain management, but is not yet commonly achieved.

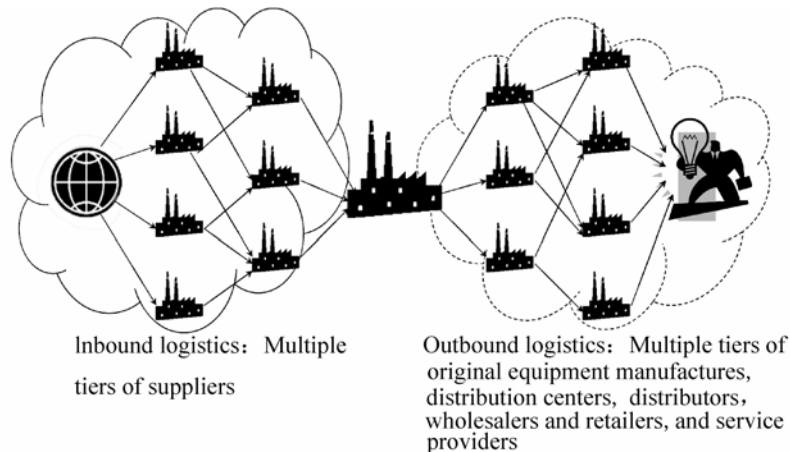


Figure 1.1 Inbound and outbound logistics

In the plant, the logistics/production boundary is in fact between organizations. Production does not only run machines and assembly stations; it also conveys work pieces between contiguous^② stations. Even though these transfers do not transform the workplaces, this activity is still considered to be production, because it is run by **the production department**.

工厂里, 物流或生产的界限实际上在作业流程之间。

Where the boundary is placed between logistics and production is a managerial decision. Technically, part preparation by logistics overlaps with many points. At some locations, **materials handlers** deliver open bins^③ of parts to flow racks directly in the assembly line; the other locations, to a warehouse from which a special operator working for production prepares the parts, picks kits^④, and delivers them to assembly. In the first case, the boundary between Logistics and Production is right behind the assembly station; in the second case, one step removed from it.

物流和生产的界限的设置是一个管理决策问题。

Another key boundary is that between the plant and the rest of the world which is usually materialized in the form of docks for receiving and shipping. **in-plant logistics** is often called

① tier *n.* 层, 等级

② contiguous *adj.* 毗邻的, 邻近的

③ bin *n.* 箱柜

④ kit *n.* (包装好的)成套材料

dock-to-dock logistics. Besides the obvious differences in distances, quantities, and vehicles,

除了距离、数量和运输装备等存在明显的区别,企业内物流和从供应商处获取零部件的内向物流以及配送成品的外向物流的管理方式也不同。企业内物流由一个专门组织进行管理。

in-plant logistics differs from the in-bound logistics of getting parts from suppliers and the out-bound logistics of distributing finished goods in the way it is managed. In-plant logistics is under the control of one organization.

In and out bound logistics, on the other hand, are ruled by the interaction of multiple independent economic agents—including multiple tiers of suppliers and distributors, trucking companies, railroads, and air and sea freight companies—making their own decisions.

1.1.4 Other Types of Logistics

1. Other Types of Logistics

(1) **Business logistics.** Logistics as a business concept evolved only in the 1950s. Tanimoto & Hakutoshobo (2000) call “business logistics” the efforts of a company to designate the expansion of these efforts to multiple tiers of suppliers and customers or distributors. Most companies, however, have little or no access to suppliers’ suppliers or customers’ customer: whatever influence they may have limited to companies they directly buy from or sell to. Companies’ actions in supply chain logistics often consist of reinforcing the tier structure to reduce the number of suppliers or customers they must interact with.

In business, logistics may have either internal focus (in-bound logistics), or external focus (out-bound logistics) covering the flow and storage of materials from point of origin to point of consumption. The main functions of a qualified logistician include inventory management, purchasing, transportation, warehousing, consultation and the organizing and planning of these activities.

(2) **Social logistics.** Tanimoto also identifies “social logistics” as the setting, maintenance, regulation, and taxation by governments of the infrastructure within which companies operate, including the following.

- *Transportation:* Roads, railroads, canals, ports and airports.
- *Communications:* Voice and data communication networks.
- *Controls and law enforcement:* Inspections of goods at border crossings and verification of regulatory compliance^①.
- *Taxation:* Tolls^②, taxes, duties, as well as incentives and subsidies designed to influence the behaviour of independent economic agents towards such common goods as preservation of the environment.

① compliance n. 依从, 顺从

② toll n. 通行费, 服务费

- *Emergency response*: Restoration^① of services after earthquakes, floods, fires or other natural or human-made disasters.

(3) **Lean logistics.** Lean logistics is the logistics dimension of lean manufacturing. Lean logistics tailors approaches to the demand structures of different items, as opposed to one-size-fits-all. It is a pull system: materials move when the destination signals that it is ready for them. Moving small quantities of many items between and within plants with short, predictable lead times requires pickups and deliveries at fixed times along fixed routes called “milk runs”. Toyota uses a worldwide network for logistics and markets in Japan through an Internet portal^②.

精益物流根据不同产品需求结构来设计，而不是原来的“以不变应万变”。

(4) **Production logistics.** The term is used for describing logistic processes within an industry. The purpose of production logistics is to ensure that each machine and workstation is being fed with the right product in the right quantity and quality at the right point in time.

The issue is not the transportation itself, but to streamline^③ and control the flow through the value adding processes and eliminates non-value adding ones. Production logistics provides the means to achieve customer response and capital efficiency. Production logistics is getting more and more important with the decreasing batch sizes. In many industries (e.g. mobile phone) batch size one is the short term aim. Track and tracing, which is an essential part of production logistics—due to product safety and product reliability issues—is also gaining importance especially in the automotive and the medical industry.

由于产品安全及可靠性问题，产品跟踪成为生产物流中的关键部分，其重要性在汽车制造和医药产业里尤为明显。

2. Professional logistician

A logistician is a professional logistics practitioner. Professional logisticians are often certified by professional associations. Some universities and academic institutions train students as logisticians, by offering undergraduate and postgraduate programs.

3. Logistics management

Logistics management is that part of supply chain management that plans, implements, and controls the efficient, effective forward and reverses flow and storage of goods, services, and related information between the point of origin and the point of consumption in order to meet customers' requirements. Logistics management activities typically include inbound and outbound transportation management, fleet management, warehousing, materials handling, order fulfillment, logistics network design, inventory management, supply/demand planning, and management of third party logistics services providers. To varying degrees, the logistics function

① restoration *n.* 赔偿，修补，重建

② portal *n.* 入口

③ streamline *v.* 组织