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中国劳动社会保障出版社

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前言

为贯彻全国职业教育工作会议精神,大力发展面向新兴产业和现代服务业的专业,推进教材建设,劳动和社会保障部教材办公室组织部分高职高专院校一批学术水平高、教学经验丰富、实践能力强的教师与行业、企业一线专家,编写了高职高专物流管理专业相关课程的教材,共15种:《现代物流管理》《物流采购与供应管理》《物流仓储与配送管理》《物流运输管理实务》《物流成本管理实务》《物流客户关系管理》《物流管现信息系统》《电子物流技术》《物流专业英语》《物流采购与供应管理实训》《物流仓储与配送管现实训》《物流运输管理实训》《集装箱码头操作与管理实训》《国际货运代理实训》和《企业物流实训》。

在教材的编写过程中, 我们贯彻了以下原则:

- 一是充分汲取高职高专在探索培养高等技术应用型人才方面取得的成功经 验和教学成果,从职业(岗位)分析入手,确定课程内容,编写相关教材。
- 二是以国家职业标准为依据,使内容涵盖助理物流师国家职业标准的相关要求。
- 三是为切实落实"管用、够用、送用"的教学指导思想,根据高职高专物流管理专业的教学特点,专业理论课教材以实际案例为切入点,便于学生的理解和掌探;实训课教材以技能培养为主线、相关知识为支撑,强化了操作技能的训练。

四是突出教材的先进性,尽量选用近几年国内外物流管理领域中的先进技术和成果,反映最新技术应用动态,模拟生产实际操作规程,以期缩短学校教育与企业需要的距离,更好地满足会业用人的需要。

在上述教材的编写过程中,得到有关省市教育部门、劳动和社会保障部门 以及一些高职高专院校的大力支持,教材的诸位主编、参编、主审等做了大量 的工作,在此我们表示衷心的感谢!同时,恳切希望广大读者对教材提出宝贵 的意见和建议,以便修订时加以完善。

> 劳动和社会保障部教材办公室 2006年1月

内容提要

本书为劳动和社会保障部培训就业司推荐教材,适用于高职高专院校物流管理专业教学,由劳动和社会保障部教材办公室组织编写。

本书主要内容包括:物流概论、容户服务、运输、包装、仓储管理、采购、 物流书信以及物流单证等。授课课时在55 学时左右。

本书由刘冉昕担任主编并负责总体框架设计、编写大纲、统稿和定稿,陈金山担任主审。参加编写的还有何伟、楚金华、张丽教、胡连荣。

本书也可供从事物流管理以及相关工作的有关人员参考。

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UNIT 1 LOGISTICS

Part I Logistics and Logistics Management

Text 1 An Introduction to Logistics

Pre-text practice.

Discussion: "Logistics means having the right thing, at the right place, at the right time." Do you think so?

What is Logistics?

[Para 1] The word logistics comes from the French "logistique", which is derived from "loger" meaning quarters (as in quartering troops). It is related to the word "lodge" (which is a much older word in English, but from the same Latin root). It entered English in the 19th century.

[Para 2] Logistics became a topic for discussion in the Business World in the 1960s and 1970s and began its rise to prominence in the 1980s. It was truly in the 1990s, however, that logistics began to garner the appreciation it deserved. In the year 2000 and beyond, the creation of flexible and effective supply and value chains will no less than define the success or failure of organizations and perhaps even entire business types.

[Para 3] There are various definitions of logistics. The terms are defined as follows:

- Logistics (business definition) is defined as a business planning framework for the management of material, service, information and capital flows. It includes the increasingly complex information, communication and control systems required in today's business environment.
- The Council of Logistics Management (1992) defined the logistics as the process of planning, implementing and controlling the efficient, cost-effective flow and storage of raw materials, work in process inventory, finished goods and related information from point of origin to point of consumption for the purpose of conforming to the customer needs.

Activities Involved in Logistics

[Para 4] From the above we can see, definition of logistics includes customer service, transportation, warehousing and storage, plant and warehouse site selection, inventory management, procurement, material handling, packaging, demand forecasting, waste disposal, return goods handling.

[Para 5] Customer service is a very important part of any organization's logistics effort. It is the output of the entire logistics system, that is, customer service and some resulting level of satisfaction are what the logistics system ultimately provides the buyer. A pioneering study that examined the state-of-the-art of customer service in major corporations defined customer service as "a customer-oriented philosophy that integrates and manages all of the elements of the customer interface within a predetermined optimum cost-service mix." Each element of a firm's can affect whether a customer receives the right product at the right place in the right condition for the right cost at the right time. Thus customer service means providing the necessary level of customer satisfaction at the lowest possible total cost.

[Para 6] Transportation refers to the physical movement of goods from point of origin to point of consumption and can involve raw materials being brought into the production process and finished goods being shipped out to the customer. Transportation includes activities such as selecting the mode of transportation (air, rail, water, pipeline, road); choosing the specific path; complying with various local transportation regulations; and being aware of both domestic and international shipping requirements. Transportation is often the single largest cost in the logistics process. Therefore, it is an important component that must be managed effectively.

[Para 7] Warehousing and storage. Warehousing is an integral part of every logistics system. It plays an important role in providing a desired level of customer service at the lowest possible total cost. Products must be stored at the plant or in the field for later sale and consumption unless consumers need them the instant they are produced. Generally, the greater the time lags between production and consumption, the larger the level of inventory required. Specific storage activities include: decisions as to whether the warehousing facilities should be owned, leased, or rented; warehouse layout and design; product mix considerations; safety and maintenance; security systems; personal training; and productivity measurement.

[Para 8] Facility location. Whether facilities are owned or rented, the location of plants and/or warehouses is extremely important. The strategic placement of plants and warehouses near the company's major markets can improve the firm's customer service levels. Proper facility location can also allow lower volume-related transportation rates in moving product from plant to warehouse, plant to plant, or warehouse to customer. The first consideration in selecting a site is the location of the firm's various markets. The needs of the customers and the location of raw materials, component parts and subassemblies are also major considerations, for the company must be concerned with inbound movement and storage of materials in addition to outbound flows.

[Para 9] Inventory management deals with balancing the cost of maintaining additional products on hand against the risk of not having those items when the customer wants them (i. e. the cost of sales). It is critical because of the financial necessity of maintaining a sufficient supply of product to meet both customers' needs and manufacturing requirements. Maintaining raw materials, component part, and finished goods inventory consumes both spece and capital. Money tied up in inventory is not available for use elsewhere. It is sufficient to note that inventory carrying costs can range from 14 to over 50 percent, depending on the product. Successful inventory control involves

determining the level of inventory necessary to achieve the desired level of customer service while considering the cost of performing other logistics activities.

[Para 10] Procurement deals with the buying of goods and services that keep the organization functioning. It includes the selection of supply source location, determination of the form in which the material is to be acquired, timing of purchases, price determination, quality control and many other facets. The changing economic environment of recent years, marked by wide variations in availability and cost of materials, has made procurement even more important in the logistics process.

[Para 11] Material handling is concerned with every aspect of the movement or flow of raw material, work in process inventory, and finished goods within a plant or warehouse. A firm incurs costs every time an item is handled. Since handling generally adds no value to a product, these operations should be kept to a minimum. Poor material handling can lead directly to loss of or damage to the goods, thus customer dissatisfaction. Material handling can act well in reducing inventory, lowering costs, and increasing productivity.

[Para 12] Packaging focuses on protecting the product while it is being transported and stored. Packaging can make it easier to store and move products by reducing handling and thereby material handling costs. In a marketing sense, the package acts as a form of promotion or advertising. Its size, weight, color, and printed information attract customers and convey knowledge about the product.

[Para 13] Demand forecasting address the need for precise amount of product and service that customers will require in the future. Knowledge of future demand levels enables logistics managers to distribute their resources to activities that will serve that demand. Sophisticated computer models, trend analysis, sales force estimates, or other methods can help develop such forecast.

[Para 14] Other activities such as waste disposal, return goods handling, etc. are also important. Since every bit of packaging is ultimately discarded, logistics managers must also consider the societal costs associated with waste disposal. The handling of returned goods, often referred to as reverse distribution, is an important part of the logistics process. Buyers may return items to the seller due to product defects, overages, incorrect items received, or other reasons. Often the returned goods cannot be transported, stored, and /or handled as easily, resulting in higher logistics cost.

New Words and Expressions

logistics [le'dzistiks] n. 物流;后勤学,后勤prominence ['prominens] n. 突出,显著,突出物complex ['kompleks] adj. 复杂的,合成的,综合的state-of-the-art adj. 先进的,技术进步的corporation ['ko:pe'reifen] n. 公司,企业predetermine ['pri:di'təmin] vt. 预定,预先确定

optimum [roptimem] adj. 最适官的
integral [rintigral] adj. 完整的,整体的
facility [forsiliti] n. 设备,工具
lease [lits] vt. 出租,租出,租得
layout [rlei aut] n. 规划,设计,(工厂等的)布局图,版面设计
subassembly [rsabersembli] n. 部件,组件
maintain [menrtein] vt. 维持,维修,继续
available [orveilebl] adj. 可用到的,可利用的,有用的;有空的,接受探访的
determine [dirtermin] vt. 决定,确定
procurement [prorkjuement] n. 采购
productivity [rprodakrtiviti] n. 生产力,生产效率
promotion [prormoufen] n. 促销;促进,发扬,提升,提拔,晋升
precise [prirsais] adj. 精确的,准确的
sophisticated [sorfistikeitid] adj. 成熟的,完善的;诡辩的,久经世故的

Useful Terms

no less than 不少于;不减于;正如 capital flow 资金流动 raw material 原材料 work in process inventory 在制品库存 finished goods 产成品 point of origin 原产地 point of consumption 消费地 conform to 符合,遵照

customer service 客户服务
inventory management 库存管理
material handling 物料搬运
demand forecasting 需求预测
waste disposal 废弃物处理
return goods handling 退货处理
transportation regulation 运输法规
component parts 零部件

Notes

Logistics means having the right thing, at the right place, at the right time.

物流意味着在正确的时间和地点, 交付正确的物品。

[Para 2] Logistics became a topic for discussion in the Business World in the 1960s and 1970s and began its rise to prominence in the 1980s.

20 世纪 60 年代和 70 年代,物流开始成为工商界讨论的话题,到 20 世纪 80 年代,物流的地位显著提高。

[Para 4] From the above we can see, definition of logistics includes customer service, transportation, warehousing and storage, plant and warehouse site selection, inventory management, procurement, material handling, packaging, demand forecasting, waste disposal, return goods handling.

从上述对物流的定义我们可以看出,物流包括客户服务、运输、仓储、工厂和仓库的选址、库存管理、采购、物料搬运、包装、需求预测、废弃物处理和退货处理。

[Para 5] A pioneering study that examined the state-of-the-art of customer service in major corporations defined customer service as "a customer-oriented philosophy that integrates and manages all of the elements of the customer interface within a predetermined optimum cost-service mix."

一项对主要大公司的先进的客户服务进行调查的前沿研究将客户服务定义为"以客户至上为宗旨,处理好与客户服务有关的一切事项,达到预定的最优化的成本—服务组合。"

[Para 6] Transportation refers to the physical movement of goods from point-of-origin to point-of-consumption and can involve raw materials being brought into the production process and finished goods being shipped out to the customer.

运输是指产品从原产地到消费地的物理性移动,包括原材料进入生产领域和产成品送至 客户手中。

[Para 7] Products must be stored at the plant or in the field for later sale and consumption unless consumers need them the instant they are produced.

产品必须被储存在工厂或其他地方,等待日后的销售和消费,除非产品一生产出来就有 客户需要它们。

Generally, the greater the time lags between production and consumption, the larger the level of inventory required.

通常,从生产到消费的时间间隔越大,所需要的库存量越大。

[Para 8] Whether facilities are owned or rented, the location of plants and/or warehouses is extremely important. The strategic placement of plants and warehouses near the company's major markets can improve the firm's customer service levels.

无论设施是自有的,还是租赁的,工厂或仓库的位置是非常重要的。将工厂和仓库战略 性地布置在公司主要的市场附近,就可极大地提高公司的客户服务水平。

[Para 9] Inventory management deals with balancing the cost of maintaining additional products on hand against the risk of not having those items when the customer wants them (i. e. the cost of sales).

库存管理平衡库存成本和销售损失成本(如当客户需要货物时却没有库存的损失)。

[Para 10] The changing economic environment of recent years, marked by wide variations in availability and cost of materials, has made procurement even more important in the logistics process.

近年来经济环境的变化,材料的种类和价格可选择的余地变大,使得采购在物流过程中 的地位越来越重要。

[Para 11] Material handling is concerned with every aspect of the movement or flow of raw material, work in process inventory, and finished goods within a plant or warehouse.

物料搬运涉及原材料、在制品和产成品在工厂或仓库中的移动或流动的各个方面。

[Para 12] Packaging can make it easier to store and move products by reducing handling and thereby material handling costs.

包装通过减少装卸进而降低物料的搬运成本、包装可使产品储存和流动更容易。

In a marketing sense, the package acts as a form of promotion or advertising.

从销售的角度来看,包装可以作为促销和广告的一种形式。

[Para 13] Knowledge of future demand levels enables logistics managers to distribute their resources to activities that will serve that demand.

通过对将来需求水平的预测,物流管理者可以将资源分配至可以服务于需求的活动中去。

[Para 14] Since every bit of packaging is ultimately discarded, logistics managers must also consider the societal costs associated with waste disposal.

因为每一样产品的包装最终都要被丢弃,物流的管理者也必须考虑与处理废弃物相关的 社会成本。

Exercises

I. Answer the following questions according to the text.

- 1. What is logistics?
- 2. What are the activities included in logistics?
- 3. Customer service is important in logistics, isn't it? Why?
- 4. What kinds of transportation modes are mentioned in the text?
- 5. What factors should be considered when selecting plants/warehouses?
- 6. What respects are involved in the procurement function?
- 7. What does inadequate package lead to?

II. Translate the following sentences into Chinese.

- In the year 2000 and beyond, the creation of flexible and effective supply and value chains will no less than define the success or failure of organizations and perhaps even entire business types.
- 2. Thus customer service means providing the necessary level of customer satisfaction at the lowest possible total cost.
- 3. Transportation includes activities such as selecting the mode of transportation (air, rail, water, pipeline, road); choosing the specific path; complying with various local transportation regulations; and being aware of both domestic and international shipping requirements.
- 4. Specific storage activities include: decisions as to whether the warehousing facilities should be owned, leased, or rented; warehouse layout and design; product mix considerations; safety and maintenance; security systems; personal training; and productivity measurement.
- Proper facility location can also allow lower volume-related transportation rates in moving product from plant to warehouse, plant to plant, or warehouse to customer.
- 6. It is critical because of the financial necessity of maintaining a sufficient supply of product to meet both customers' needs and manufacturing requirements.
- 7. Successful inventory control involves determining the level of inventory necessary to achieve the desired level of customer service while considering the cost of performing other logistics

activities.

- Procurement deals with the buying of goods and services that keep the organization functioning.
- Material handling can act well in reducing inventory, lowering costs, and increasing productivity.
- 10. The handling of returned goods, often referred to as reverse distribution, is an important part of the logistics process. Buyers may return items to the seller due to product defects, overages, incorrect items received, or other reasons.

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1.	and some resulting level of satisfaction are what the logistics system ultimately
	provides the buyer.
2.	Transportation refers to the physical movement of goods from point of origin to and
	can involve raw materials being brought into the production process and being
	shipped out to the customer.
3.	Specific storage activities include: decisions as to whether the should be owned,
	leased, or rented; warehouse layout and design;; safety and maintenance;
	security systems; personal training; and productivity measurement.
4.	Proper facility location can also allow lower in moving product from plant to ware-
	house, plant to plant, or warehouse to customer.
5.	deals with balancing the cost of maintaining additional products on hand against
	the risk of not having those items when the customer wants them.
6.	Procurement deals with the buying of and that keep the organization
	functioning.
7.	Poor material handling can lead directly to or goods, thus
8.	Since every bit of packaging is ultimately discarded, logistics managers must also consider

IV. Oral English practice.

Discussion: What will the future development of logistics industry be in China? What preparations should we do for the future development?

V. Read the dialogue with your partner and then tell what the dialogue is talking about.

Student: Professor Lee, you said that logistics is needed by any company that sells its products.

Professor: Yes, sure.

Student: That reminds me of a story I read in my childhood entitled A Thousand-men Cake.

Professor: Was that a very big cake?

Student: No. It was a small one. It said that at least a thousand people had taken part in the making of the small cake.

Professor: Really? Did the story mention any one in particular?

the societal costs associated with _____.

Student: I'm afraid not. As far as I can remember, it said that lots of people did various work in the process of making the cake from the time the wheat was grown.

Professor: In that case, the *A Thousand-men Cake* is similar to logistics, because both have to go through the different steps of preparation. But modern logistics employs far more technologies.

Student: What is modern logistics like?

Professor: Could you think of a company that sells any products?

Student: Let me see. Ah, yes, I have one here. It is the KFC chain shop we went to last Sunday.

Professor: It could be a good example.

Student: The chicken must be bought from some chicken farms regularly and other materials to be used in its chain shops, such as paper napkins and drinks, should be bought from different suppliers and be shipped to the designated places.

Professor: You are perfectly right. But what you said is only part of the supply chain. If a company takes up the job of supplying KFC with all the things needed in the operation of the chain shops, that is logistics.

Student: Thanks. Now I have a clearer picture of what logistics is.

Professor: You are welcome.

Text 2 Logistics Management

Pre-text practice.

Discussion: What does logistics mean to the companies who are much more concerned with the flow of finished goods from the end of the production line to the customer?

[Para 1] As one writer noted "One of the most important phenomena of the 20th century has been the international expansion of industry. Today, virtually all major firms have a significant and growing presence in business outside their country of origin." Furthermore, current business conditions make the distinction between domestic and international distribution unimportant. Successful enterprises have realized that to survive and prosper in the business environment of today and tomorrow, they must go heyond the organizational structures and strategic approaches of the past, and adopt a worldwide, global view of business. Now, an increasing number of companies are hecoming involved in international markets through exporting, licensing, joint ventures, and ownership. With this expansion into global markets comes a need to develop worldwide logistics network. That is logistics management.

[Para 2] The Council of Logistics Management (1992) defined the logistics management as the process of planning, implementing and controlling the efficient, cost-effective flow and storage of raw materials, work in process inventory, finished goods and related information from point of origin to point of consumption for the purpose of conforming to the customer needs.

Evolution of the Logistics Management Concept

[Para 3] In conclusion, logistics management concept has evolved over the last three decades from the narrowly defined distribution management to the integrated management and to the global supply chains.

[Para 4] Physical distribution. The first stage of the logistics management concept began during the 1960s to replace the fragmented management by physical distribution management. Physical distribution is the term embraces the whole movement of the goods from the end of the production line to the consumer. These activities include functions such as transportation, warehousing, materials handling, protective packaging, inventory control, plant and warehouse location, order processing, markets forecasting and customer service. Physical distribution approach has gained wide acceptance among various manufacturers and distributors, but the limitation of the physical distribution approach soon became evident since it did not consider the cost containment issues of the raw material and work in process inventory (Which accounted for, on average, 60 percent of the total material inventory).

[Para 5] Internally integrated logistics. Logistics management has experienced the second transformation in 1980s. The experience during 1960s and 1970s suggested that the physical distribution function should be integrated with pre-production activities such as material sourcing and work in process inventory to form a total material flow management. Material flow was thought to be a process that involved horizontal movement of inventory from the time the raw materials were delivered until the time when an account receivable was recorded by the firm (a sale made and the product shipped). Emphasis was varied from the minimization of the level of inventory to the speed of processing (e. g. inventory velocity). These logistics management techniques were primarily understood at the level of individual firms, but it had little impact on the improvement in the overall efficiency of the national economy.

[Para 6] Externally integrated logistics. This integrated logistics management approach has made the third evolution in the early 1990s and beyond. It has extended the concept beyond one firm to all firms involved in the whole supply chain, outsourcing the internally supplied materials and products to external suppliers. This open idea of enterprises offered firms an opportunity to view the relationship with vendors, suppliers, third party logistics support agents and customers in a different way, each forming a part of the channel. Participants in the channel gained competitive advantage through improving the overall channel efficiency. Coupled with the recent development of electronic data interchange (EDI), this approach began to bring about a broader impact on macroeconomic efficiency.

[Para 7] Global supply chain management. The fourth evolution has taken place in form of the global logistics management, which has been applied by MNCs. With declining profit margin in the domestic market and in face of need of continued business expansion, these corporations are seeking new worldwide markets on an unprecedented scale. Global markets and sale initiatives are the trends toward which MNCs are increasingly gearing up. This trend for internationalization, in turn, requires much more sophisticated management techniques over the entire process of the com-