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УПРАВЛЕНИЕ ДИСТАНЦИОННОГО ОБУЧЕНИЯ И ПОВЫШЕНИЯ КВАЛИФИКАЦИИ

Кафедра «Иностранных языков»

Методические указания

по обучению профессионально-ориентированному чтению текстов по дисциплине

«Английский язык»

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Аннотация

Методические указания предназначены для бакалавров направления 38.03.02 «Менеджмент», профиль «Логистика». Содержат тексты для разного вида чтения и перевода научного текста на профессионально-ориентированную тематику, а так же серию лексико-грамматических упражнений.

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MODULE I. LOGISTICS

Unit 1
The definition of the term «logistics»

1. Discuss in pairs:

- What is your association when you hear the word "logistics" at once?
- Can you guess what the etymology of the word "logistics" is?
- Find out some additional information on history of logistics and the founders of this branch.

2. Read out and translate the text:

Logistics is the management of the flow of goods between the point of origin and the point of consumption in order to meet some requirements, for example, of customers or corporations. The resources managed in logistics can include physical items, such as food, materials, animals, equipment and liquids, as well as abstract items, such as time, information, particles, and energy. The logistics of physical items usually involves the integration of information flow, material handling, production, packaging, inventory, transportation, warehousing and often security.

The complexity of logistics can be modeled, analyzed, visualized, and optimized by dedicated simulation software. The minimization of the use of resources is a common motivation in logistics for import and export.

The prevalent view is that term *logistics* comes from the late 19th century: from French ***logistique*** (*loger* means *to* lodge). Others attribute a Greek origin to the word: **λόγος**, meaning reason or speech; **λογιστικός**, meaning accountant or responsible for counting.

Logistics is often defined as "the branch of military science relating to procuring, maintaining and transporting material, personnel and facilities."

However, the logistics could be also defined as "the detailed coordination of a complex operation involving many people, facilities, or supplies", and as "the detailed organization and implementation of a complex operation".

Another dictionary definition is "the time-related positioning of resources". As such, logistics is commonly seen as a branch of engineering that creates "people systems" rather than "machine systems".

Logistics includes the integrated planning, control, realization, and monitoring of all internal and network-wide material, part, and product flow, including the necessary information flow, industrial and trading companies along the complete value-added chain (and product life cycle) for the purpose of conforming to customer requirements.

Logistics is the process of planning, implementing, and controlling the effective and efficient flow of goods and services from the point of origin to the point of consumption.

3. Answer the questions:

- What is the most wide-spread definition of the term "logistics"?
- When did the term "logistics" come into general use?
- How could we describe the common motivation in logistics?
- What does logistics include?
- What is the total logistical process?

4. Decide if the following statements are true or false. Prove your ideas according to the text:

- The logistics of physical items usually involves the integration of information flow, material handling, production, packaging, inventory, transportation, warehousing and often security.
- Logistics is the process of making, implementing, and controlling the effective and efficient flow of goods and services from the point of origin to the point of consumption.
- Logistics is defined as a matter of a road-construction science.
- The term logistics appeared in the late 18th century.
- Logistics is a kind of a science including different spheres of goods supply chain.

5. Match the columns to make the collocations:

1/flow of	a. handling
2/complexity of	b. value-added chain
3/time-related	c. positioning of resources
4/material	d. goods
5/trading	e. companies
6/complete	g. logistics

6. Make up a short plan of the text and retell it paying attention to the definitions of the term "logistics" made in the text.

Unit 2
A profession of a logistician

1. Discuss in pairs:

- How do you understand the main responsibility of a logistician?
- What qualities should a person obtain to become a logistician?
- Enumerate the advantages of being a logistician.

2. Read out and translate the text:

A **logistician** is a professional logistics practitioner. Professional logisticians are often certified by professional associations. One can either work in a pure logistics company, such as a shipping line, airport, or freight forwarder, or within the logistics department of a company.

However, as mentioned above, logistics is a broad field, encompassing procurement, production, distribution, and disposal activities. Hence, career perspectives are broad as well. A new trend in the industry are the 4PL, or fourth-party logistics, firms, consulting companies offering logistics services.

Some universities and academic institutions train students as logisticians, offering undergraduate and postgraduate programs.

The International Association of Public Health Logisticians (IAPHL) is a professional network that promotes the professional development of supply chain managers and others working in the field of public health logistics and commodity security, with particular focus on developing countries. The association supports logisticians worldwide by providing a community of practice, where members can network, exchange ideas, and improve their professional skills.

3. Answer the questions:

- Where could a professional logistician work?
- Could you get a vocational training for getting a diploma of a logistician?
- What is IAPHL? What are the main purposes of this organization?

4. Decide if the given statements are true or false. Prove your ideas according to the text:

- A **logistician** is a professional logistics analyst.

- A logistician could work as a teacher in an academic institution.
- The International Association of Public Health Logisticians is a professional network that promotes the professional development of supply chain managers.
- Logistics is a broad field.
- The association supports logisticians worldwide by providing a school of practice, where members can network, exchange ideas, and improve their professional skills.

5. Make up a short plan of the text and retell it paying attention to the definitions of the term "logistician" made in the text.

Unit 3
Logistics fields

1. Discuss in pairs:

- What do you think the term "logistics field" mean?
- Should the professional logistician obtain the basic knowledge of all the logistics fields?
- Could you think of any other scientific branches that could be divided into several fields?

2. Read and translate the text:

Inbound logistics is one of the primary processes of logistics, concentrating on purchasing and arranging the inbound movement of materials, parts, and/or finished inventory from suppliers to manufacturing or assembly plants, warehouses, or retail stores.

Outbound logistics is the process related to the storage and movement of the final product and the related information flows from the end of the production line to the end user.

Given the services performed by logisticians, the main fields of logistics can be broken down as follows:

- Procurement logistics
- Production logistics
- Distribution logistics
- After-sales logistics
- Disposal logistics
- Global logistics
- Domestics logistics
- Concierge Service

Procurement logistics consists of activities such as market research, requirements planning, make-or-buy decisions, supplier management, ordering, and order controlling. The targets in procurement logistics might be contradictory: maximizing efficiency by concentrating on core competences, outsourcing while maintaining the autonomy of the company, or minimizing procurement costs while maximizing security within the supply process.

Production logistics connects procurement to distribution logistics. Its main function is to use available production capacities to produce the products needed in distribution logistics. Production logistics activities are related to organizational concepts, layout planning, production planning, and control.

Distribution logistics has, as main tasks, the delivery of the finished products to the customer. It consists of order processing, warehousing, and transportation. Distribution logistics is necessary because the time, place, and quantity of production differ with the time, place, and quantity of consumption.

Disposal logistics has as its main function to reduce logistics cost(s) and enhance service(s) related to the disposal of waste produced during the operation of a business.

Reverse logistics denotes all those operations related to the reuse of products and materials. The reverse logistics process includes the management and the sale of surpluses, as well as products being returned to vendors from buyers.

Reverse logistics stands for all operations related to the reuse of products and materials. It is "the process of planning, implementing, and controlling the efficient, cost effective flow of raw materials, in-process inventory, finished goods and related information from the point of consumption to the point of origin for the purpose of recapturing value or proper disposal. More precisely, reverse logistics is the process of moving goods from their typical final destination for the purpose of capturing value, or proper disposal.

The opposite of reverse logistics is **forward logistics**."

Green Logistics describes all attempts to measure and minimize the ecological impact of logistics activities. This includes all activities of the forward and reverse flows. This can be achieved through intermodal freight transport, path optimization, vehicle saturation and city logistics.

Business logistics is a special branch of economic logistics that we should give a more detailed analysis.

3. Answer the questions:

- What is the difference between inbound and outbound logistics?
- Give a definition to:
  - Procurement logistics
  - Production logistics
  - Distribution logistics
  - Disposal logistics
  - Reverse logistics
  - Forward logistics
  - Green logistics

4. Decide if the given statements are true or false. Prove your ideas according to the text:

- Inbound logistics is an absolute synonym of outbound logistics.
- The targets in procurement logistics might be contradictory.
- Production logistics connects procurement to green logistics.
- Disposal logistics has as its main function to reduce logistics cost(s) and enhance service(s) related to the disposal of waste produced during the operation of a business.
- The reverse logistics process includes the management and the production of surpluses.

5. Match the terms with the definition:

1/ Procurement logistics	Its main function is to use available production capacities to produce the products needed in distribution logistics.
2/Production logistics	… describes all attempts to measure and minimize the ecological impact of logistics activities.
3/Distribution logistics	… consists of activities such as market research, requirements planning, make-or-buy decisions, supplier management, ordering, and order controlling.
4/Disposal logistics	… process includes the management and the sale of surpluses, as well as products being returned to vendors from buyers.
5/Reverse logistics	… its main function to reduce logistics cost(s) and enhance service(s) related to the disposal of waste produced during the operation of a business.
6/Forward logistics	The opposite of reverse logistics.

6. Make up a short plan of the text and retell it paying attention to the definitions made in the text.

MODULE II. BUSINESS LOGISTICS

Unit 4
The general notion of business logistics

1. Discuss in pairs:

• What differences could be pointed out between business logistics and transportation logistics?

• What problems does business logistics solve?

2. Read and translate the text:

One definition of business logistics speaks of "having the right item in the right quantity at the right time at the right place for the right price in the right condition to the right customer". Business logistics incorporates all industry sectors and aims to manage the fruition of project life cycles, supply chains, and resultant efficiencies.

The term business logistics has evolved since the 1960s due to the increasing complexity of supplying businesses with materials and shipping out products in an increasingly globalized supply chain, leading to a call for professionals called "supply chain logisticians".

In business, logistics may have either an internal focus (inbound logistics) or an external focus (outbound 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. Logisticians combine a professional knowledge of each of these functions to coordinate resources in an organization.

There are two fundamentally different forms of logistics: one optimizes a steady flow of material through a network of transport links and storage nodes, while the other coordinates a sequence of resources to carry out some project.

The nodes of a distribution network include:

• factories where products are manufactured or assembled

• a depot or deposit is a standard type of warehouse thought for storing merchandise (high level of inventory).

• ideas for order processing and order fulfillment (lower level of inventory) and also for receiving returning items from clients.

• transit points are built for cross docking activities, which consist in reassembling cargo units based on deliveries scheduled (only moving merchandise).

• Traditional retail stores, modern supermarkets, hypermarkets, discount stores or also voluntary chains, consumer cooperative, groups of consumer with collective buying power. Note that subsidiaries will be mostly owned by another company and franchisers, although using other company brands, actually own the point of sale.

There may be some intermediaries operating for representative matters between nodes such as sales agents or brokers.

3. Answer the questions:

- What is the definition of the term "business logistics"?
- What does business logistics incorporate?
- When did the term "business logistics" appear?
- What are the forms of logistics?
- Enumerate the nodes of the distribution network.
- Is there an assistance of any intermediaries in the logistic process?
- What are the main functions of the qualified logistician?

4. Decide if the given statements are true or false. Prove your ideas according to the text:

- Business logistics speaks of "having the right item in the right quantity at the right time at the right place for the right price in the right condition to the right customer".
- The term of "business logistics" appeared in 1975.
- Business logistics may either be internal and inbound.
- The main functions of a qualified logistician include production and sale of a good.
- Business logistics strictly denies the possibility of intermediaries assistance in the process.

5. Match the columns to make the collocations:

1/ business	a. chains
2/ life	b. materials
3/supply	c. logistics
4/ resultant	d. inventory
5/ storage of	e. cycles
6/ high level of	f. efficiencies

6. Explain in English the meaning of the following expressions:

- project life cycles
- supply chain
- storage nodes
- retail stores
- groups of consumer
- Intermediaries assistance in the process.
- order fulfillment

7. Make up a short plan of the text and retell it paying attention to the definitions made in the text.

Unit 5
Logistic families and metrics

1. Discuss in pairs:

- What kind of products could be classified as a logistic family?
- Give several examples of goods belonging to the same logistic family.

2. Read and translate the text:

A logistic family is a set of products which share a common characteristic: weight and volumetric characteristics, physical storing needs (temperature, radiation,…), handling needs, order frequency, package size, etc. The following metrics maybe used by the company to organize its products in different families:

- Physical metrics used to evaluate inventory systems include stocking capacity, selectivity, superficial utilization, volumetric utilization, transport capacity, transport capacity utilization.
- Monetary metrics used to include space holding costs (building, shelving and services) and handling costs (people, handling machinery, energy and maintenance).

Other metrics may present themselves in both physical or monetary form, such as the standard Inventory turnover.

Transportation and handling systems are rather important cycles in connection with the business logistics. Handling systems include: trans-pallet handlers, counterweight handler, retractable mast handler, bilateral handlers, trilateral handlers, AGV and stacker handlers. Storage systems include: pile stocking, cell racks (either static or movable), cantilever racks and gravity racks.

Order processing is a sequential process involving: processing withdrawal list, picking (selective removal of items from loading

units), sorting (assembling items based on destination), package formation (weighting, labeling and packing), order consolidation (gathering packages into loading units for transportation, control and bill of lading).

Sorting can be done manually through carts or conveyor belts, or automatically through sorters.

3. Answer the questions:

- What is a logistic family?
- What types of metrics can you enumerate?
- What are the most important cycles in connection with the business logistics?
- What do the handling systems include?
- Speak about the peculiarities of the storage systems.

4. Decide if the given statements are true or false. Prove your ideas according to the text:

- A logistic family is a set of products totally different in characteristics.
- Physical metrics used to evaluate inventory systems.
- Monetary metrics used to include money losses.
- Handling system is performed only by computers and robots.
- Order processing is not a sequential process.

5. Match the columns to make the collocations:

1/logistic	a.belts
2/Physical	b.metrics
3/Monetary	c.handler
4/handling	d.consolidation
5/counterweight	e.family
6/order	f.systems
7/conveyor	g.metrics

6. Make up a short plan of the text and retell it paying attention to the definitions made in the text.

Unit 6
Logistics management

1. Discuss in pairs:

- How do you understand the term "logistics management"?
- Logistics management is a bordering field of many scientific branches. Enumerate them.

2. Read and translate the text:

Logistics management is a part of the supply chain that plans, implements, and controls the efficient, effective forward and reverse flow and storage of goods, services, and related information between the point of origin and the point of consumption in order to meet customer requirements.

Similarly to production systems, logistic systems need to properly configured and managed. Actually a number of methodologies have been directly borrowed from operations management such as using Economic Order Quantity models for managing inventory in the nodes of the network.

Distribution resource planning (DRP) is similar to MRP, except that it doesn't concern activities inside the nodes of the network but planning distribution when moving goods through the links of the network.

Traditionally in logistics configuration may be at the level of the warehouse (node) or at level of the distribution system (network).

Although configuring a distribution network from zero is possible, logisticians more usually have to deal with restructuring existing networks due to presence of an array of factors: changing demand, product or process innovation, opportunities for outsourcing, change of government policy toward trade barriers, innovation in transportation means , introduction of regulations (notably those regarding pollution) and availability of ICT supporting systems (e.g. ERP or e-commerce).

Once a logistic system is configured, management, meaning tactical decisions, takes place, once again, at the level of the warehouse and of the distribution network. Decisions have to be made under a set of constraints: internal, such as using the available infrastructure, or external, such as complying with given product and expiration dates.

At level of the warehouse, the logistician must decide how to distribute merchandise over the racks. Three basic situations are traditionally considered: shared storage, dedicated storage (rack

space reserved for specific merchandise) and class based storage (class meaning merchandise organized in different areas according to their access index).

Picking efficiency varies greatly depending on the situation. For man to goods situation, a distinction is carried out between high level picking (vertical component significant) and low level picking (vertical component insignificant). A number of tactical decisions regarding picking must be made:

- Routing path: standard alternatives include transversal routing, return routing, midpoint routing and largest gap return routing
- Replenishment method: standard alternatives include equal space supply for each product class and equal time supply for each product class.
- Picking logic: order picking vs batch picking

3. Answer the questions:

- What is a logistics management?
- What is a logistics system?
- What three basic situations are to be considered?
- How does the picking efficiency vary?
- What tactical decisions are to be made?

4. Decide if the given statements are true or false. Prove your ideas according to the text:

- Logistics management is a part of the supply chain that plans, implements, and controls the efficient.
- Distribution resource planning (DRP) is similar to MRP.
- Traditionally in logistics configuration may be at the level of the retail stores (node) or at level of the distribution system (network).
- At level of the warehouse, the logistician must decide how to distribute merchandise over the racks.
- Warehouse level is the same that distribution system.

5. Make up a short plan of the text and retell it paying attention to the definitions made in the text.

Unit 7. Warehouse management systems and warehouse control systems

1. Discuss in pairs:

- What is the difference between warehouse management and logistics management?
- What are the main functions of the warehouse management systems?

2. Read and translate the text:

Although there is some overlap in functionality, warehouse management systems (WMS) can differ significantly from warehouse control systems (WCS).

Simply put, a WMS plans a weekly activity forecast based on such factors as statistics and trends, whereas a WCS acts like a floor supervisor, working in real time to get the job done by the most effective means.

For instance, a WMS can tell the system that it is going to need five of stock-keeping unit (SKU) A and five of SKU B hours in advance, but by the time it acts, other considerations may have come into play or there could be a logjam on a conveyor. A WCS can prevent that problem by working in real time and adapting to the situation by making a last-minute decision based on current activity and operational status. Working synergistically, WMS and WCS can resolve these issues and maximize efficiency for companies that rely on the effective operation of their warehouse or distribution center.

Logistics automation is the application of computer software and/or automated machinery to improve the efficiency of logistics operations.

Typically this refers to operations within a warehouse or distribution center, with broader tasks undertaken by systems and enterprise resource planning systems.

Industrial machinery can typically identify products through either Bar Code or RFID technologies.

Information in traditional bar codes is stored as a sequence of black and white bars varying in width, which when read by laser is translated in a binary sequence, which according to fixed rules can be converted in a decimal number. Sometimes information in a bar code can be transmitted through radio frequency, more typically radio transmission is used in RFID tags. An RFID tag is card containing a memory chip and an antenna which transmits signals to a reader.

RFID may be found on merchandise, animals, and vehicles and people as well.

3. Answer the questions:

- Can the warehouse management systems differ significantly from warehouse control systems?
- What is the logistics automation?
- How is information traditionally stored?
- What is the main function of WMS?
- How could the information be transmitted?

4. Decide if the given statements are true or false. Prove your ideas according to the text:

- Warehouse management systems (WMS) can differ significantly from warehouse control systems (WCS).
- Logistics automation is the application of computer software only.
- An RFID tag is card containing a memory chip and an antenna which transmits signals to a reader.
- Warehouse is the same that distribution centre.
- Information in traditional bar codes is stored as a sequence of black and white bars varying in width.

5. Match the columns to make the collocations:

1/ warehouse	a.unit
2/ a floor	b.codes
3/stock-keeping	c.supervisor
4/ a last-minute	d.decision
5/ bar	e.management
6/ decimal	f.chip
7/ a memory	g.number

6. Make up a short plan of the text and retell it paying attention to the definitions made in the text.

Unit 8
Logistics outsourcing

1. Discuss in pairs:

- How could you explain the notion of "outsourcing".
- What do you think the terms "third-party logistics" and "fourth-party logistics" mean?

2. Read and translate the text:

Logistics outsourcing involves a relationship between a company and an LSP (logistic service provider), which, compared with basic logistics services, has more customized offerings, encompasses a broad number of service activities, is characterized by a long-term orientation, and thus has a strategic nature.

Outsourcing does not have to be complete externalization to a LSP, but can also be partial:

- A single contract for supplying a specific service on occasion
- Creation of a spin-off
- Creation of a joint venture

Third-party logistics

Third-party logistics (3PL) involves using external organizations to execute logistics activities that have traditionally been performed within an organization itself. According to this definition, third-party logistics includes any form of outsourcing of logistics activities previously performed in house.

For example, if a company with its own warehousing facilities decides to employ external transportation, this would be an example of third-party logistics. Logistics is an emerging business area in many countries.

Fourth-party logistics

The concept of a fourth-party logistics (4PL) provider was first defined by Andersen Consulting (now Accenture) as an integrator that assembles the resources, capabilities, and technology of its own organization and other organizations to design, build, and run comprehensive supply chain solutions.

Whereas a third-party logistics (3PL) service provider targets a single function, a 4PL targets management of the entire process. Some have described a 4PL as a general contractor that manages other 3PLs, truckers, forwarders, custom house agents, and others, essentially taking responsibility of a complete process for the customer.

3. Answer the questions:

- What does logistic outsourcing involve?
- What is the third-party logistics?
- What is the fourth-party logistics?

4. Decide if the given statements are true or false. Prove your ideas according to the text:

- Logistics outsourcing involves a relationship between a company and an LSP (logistic service provider).
- Outsourcing is a complete externalization to a LSP.
- Third-party logistics includes any form of outsourcing of logistics activities previously performed in house.
- The concept of a fourth-party logistics (4PL) provider was first defined by Rob Miller Enc.
- An example of third-party logistics is an assistance of external transportation.

5. Match the terms with the definition:

1/ Logistics outsourcing	a. involves using external organizations to execute logistics activities that have traditionally been performed within an organization itself.
2/Third-party logistics	b. involves a relationship between a company and an LSP (logistic service provider), which, compared with basic logistics services, has more customized offerings, encompasses a broad number of service activities, is characterized by a long-term orientation, and thus has a strategic nature.
3/ Third-party logistics	c. is an integrator that assembles the resources, capabilities, and technology of its own organization and other organizations to design, build, and run comprehensive supply chain solutions.
4/fourth-party logistics	d. includes any form of outsourcing of logistics activities previously performed in house.

6. Make up a short plan of the text and retell it paying attention to the definitions made in the text.

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