

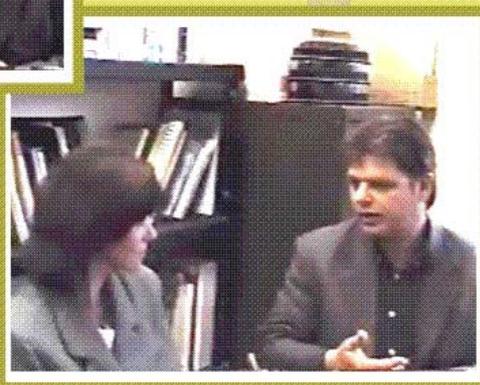
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МУЛЬТІМЕДІЙНИЙ ПОСІБНИК

з англійської мови

для організації самостійної роботи
з відеоматеріалами

(для студентів, магістрів і аспірантів)



Харків - ХНАМГ - 2008

МІНІСТЕРСТВО ОСВІТИ І НАУКИ УКРАЇНИ
Харківська національна академія міського господарства

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Мультимедійний посібник з англійської мови для організації самостійної роботи з відео матеріалами (для студентів, магістрів і аспірантів). Укл. Наумова І.О., Бучковська С.А. – Харків: ХНАМГ, 2008 – 46 с. англ. мовою.

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PREFACE

“Common European Framework of Reference for Languages: Learning, Teaching, Assessment (CEF)” enhances using video both as a facility of students motivation and their peer assessment. Video has been proved to be an effective method in teaching English as a foreign language. It can be used in a variety of instructional settings — in classrooms, in distance learning where information is broadcast from a central point of learners who interact with the facilitator via video or computer, and in self-study and evaluation situations. It also can be used in teacher’s self and professional development or with students as a way of presenting content, initiating conversations, and providing illustrations for various concepts. Teachers and students can always create their own videotapes as content for the class or as a means to assess learners’ performance.

The video material presented in this booklet was shot by its authors in the University of Abertay Dundee in 2000. The foreign language department of Kharkiv State Academy of Municipal Economy participated in the pursuit of the European Project. Co-operation with the University of Abertay Dundee in the UK within the framework of the Tempus-Tacis Project provided project participants the opportunity to gain a real-world professional perspective by applying English for solving their vocational and personal tasks that was reflected in the content of video educational material.

This booklet aims to achieve the following:

- Videotape authentic material to give examples of particular language functions in operation. These are situations that EFL learners are likely to encounter through their day-to-day socio-cultural interaction with native speakers of English.
- Intrinsically motivate students by presenting authentic language interaction, providing an authentic look at the profession, culture, aiding

comprehension, and providing students with a medium such as the videotaped situations.

The complimentary texts are intended to be a source of additional information on the co-partner-University, its vocational centres, range of scholar concerns and a great variety of opportunities of educational tracts. The texts can be used for independent study of students for retrieving particular information and data on educational and cultural life of Scottish and Ukrainian higher educational establishments.

Once we implement the videotaped material with the above-mentioned objectives, we will provide students with opportunities to practice using the language skills in authentic communicative setting.

Acknowledgements

First of all we want to thank all our colleagues from the University of Abertay Dundee who were so enthusiastic about our shooting the film. The most heartiest thanks go to Brian Coghlan who agreed to participate in our project and greatly assisted in pursuing it. We are also especially grateful to Catherine Rice for her collaboration in the making of this manual.

We want to thank our colleagues from Environmental Department of Kharkiv National Academy of Municipal Economy for the opportunity of participating in the Tempus-Tacis project in 1999-2001.

PART I

INTRODUCTORY READING

I

Pre-reading

1. List the various kinds of water use and the problems associated with each of them.
2. What are the major sources of water pollution? Try to differentiate between point and nonpoint sources of pollution.
3. Compare water use and pollution in industrialized and developing countries.
4. How can water pollution be controlled? Differentiate between primary, secondary and tertiary sewage treatments.
5. List the problems associated with water-use planning. Explain the necessity of water management.

THE PROBLEM OF WATER MANAGEMENT

Water resources must be managed effectively to take account of the needs of users and to take account of water quality and wider environmental and recreational concerns. Over-abstraction and over-usage can result in the drying up or depletion of lakes, rivers, streams and groundwater, thereby causing damage to wildlife habitats, deterioration in water quality and adverse impacts on recreation and amenity.

In the past, wastes discharged into waterways with little regard to the costs imposed on other users by the resulting decrease in water quality. With today's increasing demands for high-quality water, unrestrained waste disposal could lead to serious conflicts about water users and cause social, economic, and environmental losses in both local and an international level.

Providing water services for metropolitan areas is another serious water-planning issue. Metropolitan areas must provide three basic water services: water supply for human and industrial needs; wastewater collection and treatment; storm-water collection and management.

Water for human and industrial use must be properly treated and purified. It is then pumped through a series of pipes to consumers. After the water is used, it flows through a network of sewers to a wastewater treatment plant before it is released. Metropolitan areas must also deal with great volumes of excess water during storms. Because urban areas are paved and little rainwater can be absorbed into the ground, management of storm water is significant problem. Cities often have severe local flooding because the water is channeled along streets to storm sewers. If these sewers are overloaded or blocked with debris, the water cannot escape and flooding occurs.

All water services provided by metropolitan areas are expensive. These services must be provided with an understanding that water supplies are limited. Also, water's ability to dilute and degrade pollutants is limited. Proper land-use planning is essential if these objectives are to be met.

In pursuing these objectives, city planners encounter many obstacles. Large metropolitan areas often have hundreds of local jurisdictions that divide responsibility for management of basic water services.

In England and Wales the National Rivers Authority (NRA) are responsible for managing water resources. Water service companies and water-only companies are responsible for public water supplies. The National Rivers Authority's responsibilities for the management of water resources include water resource planning, authorizing and controlling abstractions and operational involvement in augmenting river flows to support abstractions, and protecting the environment through river regulation and water transfer schemes. The NRA maintains management agreements

with water companies, taking account of the need to release water from reservoirs for the benefit of the downstream river environment, and other uses such as recreation.

The NRA also has responsibilities for controlling pollution in inland, estuarial and coastal waters. Pollution control is carried out through discharge consents (any discharge by industry, farms, sewage treatment works into controlled waters has to be authorized by the NRA, having regard to the type and concentration of pollutants, volume of discharge), monitoring water quality and the achievement of water quality standards. In addition the NRA has responsibilities for flood defense and land drainage, salmon and freshwater fisheries, navigation in some areas, nature conservation and recreation in inland waters and associated land.

In Scotland, public water supplies are provided by the Regional and Islands Councils; River Purification Authorities (RPAs) are responsible for maintaining and improving the water environment, and river gauging (taking measurements).

In Northern Ireland, the Department of the Environment for Northern Ireland has responsibilities for water resources, supplies and sewerage services.

The Environment programme covers the science, technology and management that is needed to develop sustainable and economic solutions to a wide range of environmental challenges. Our world needs well educated committed professionals to help generate solutions to environmental problems and prevent future problems developing. A number of courses at different higher educational establishments are aimed at producing graduates who can become those professionals.

Follow-up

1. How can you characterize available water resources and water quality in your country? Give some examples to support your answer.
2. Are there any regulations or federal laws which control water use in your country? What authorities are responsible for managing water resources in Ukraine?

3. Try to explain why the problem of water management must be the problem of common concern to people all over the world.

II

Pre-reading

1. What do you know about the system of higher education in Great Britain?
2. What are the oldest universities in the United Kingdom with a national and international reputation for excellence? Are you familiar with the history of these educational establishments?
3. What have you heard about the programmes providing foreign students with the opportunity to get higher education in Great Britain?
4. What are the advantages of studying in Britain?

HIGHER EDUCATION ESTABLISHMENTS IN GREAT BRITAIN

When compulsory education or optional full-time school education ends, an entirely different life begins. For those who go to universities in other parts of the country, this is the first period of real independence. Each young person in full-time education, in part-time vocational education or who has just left school or college, is entitled to free advice and guidance from their local careers service. The careers service helps them to explore the options available so that they can make realistic and informed decisions about employment, education and training. Careers service staff are trained to professional standards and provide young people with impartial and objective guidance, which is based on their individual needs. They will also give advice on interviewing skills, completing CVs and application forms, and letter-writing.

After their period in further education, young people have the opportunity to go on to higher education in one of Britain's 80 universities, each of which have complete academic freedom and provide range of courses, leading to Higher

National Diplomas, Bachelor of Arts and Bachelor of Science Honors Degrees, and further postgraduate qualifications. Entrants are selected by admission tutors on the basis of their GCE A level or GNVQ results, or on the quality of their vocational qualifications. Over the last 15 years, the proportion of young people going into higher education has risen from one in eight to one in three.

Most higher education students receive some financial support from their local education authority, with the rest of their money made up through parental support, or through the Student Loans Company set up by central government to provide subsidized loans for students. As a recent development, the government requires that full-time students (except for those from low-income families) make a contribution towards their tuition fees, formerly paid for by local education authorities. In certain cases, large companies sponsor students through their degree courses. The Armed Forces also sponsor selected students through university cadetships and Bursaries.

Follow-up

1. Are there any centers in Ukraine where young people can get information about the options of employment, education and training?
2. How can you characterize the system of higher education in your country?
Try to compare this system with the system of education in Great Britain.
3. How has the proportion of young people going into higher education changed over the last years in Ukraine?
4. Have you heard of any programmes which sponsor Ukrainian students?

III

Pre-reading

1. What student cities do you know in Scotland? What educational establishments are they famous for? How can you evaluate the role of these educational establishments in the system of higher education in the UK?
2. Have you got any ideas concerning what world-leading courses are offered to students at the universities in Scotland?
3. Have you heard about the priority fields of scientific investigations of any of the universities in Scotland? What are the practical implementations of this work?
4. What do you know about the facilities provided at the universities of the UK to make the students' life comfortable and creative?

THE UNIVERSITY OF ABERTAY DUNDEE

Dundee is Scotland's student city with more young people in full-time higher education than any other. Over 39,150 people study in the City of Discovery. It is a great place to be a student. It is up and coming vibrant city with a great student culture. In fact, over 10% of the City's population during term time is made up of students.

The University of Abertay Dundee has been educating Scotland's workforce since 1888. Over 50 nationalities are represented in the student community. Abertay has over 5600 students, with 4700 based on campus. Around 67% of students are from Scotland, 9% from Northern Ireland, 10% from England and Wales, and 14% from overseas.

The University offers world-leading courses in Accounting, Biological Sciences, Biotechnology, Business Studies and Management, Civil Engineering, Communication, Computing, Construction Management, Economics, Electronics, Engineering, Environment, Financial Services, Food and Consumer Sciences,

Forensic Science, Hospitality Management, Internet and Communication Technologies, Law, Marketing, Mechatronics, Nursing, Psychology, Quantity Surveying, Sociology, Sport Coaching and Development, Tourism. Abertay has world-leading courses in computer arts and computer games technology and is home to the International Centre for Computer Games & Virtual Entertainment (ICCAVE). It was the first university in the UK to have a WAP website. At present it is the only university in Scotland to offer undergraduate degrees in forensic sciences and forensic psychobiology. The University has an average of 1 lecturer for every 16 students. Over 1200 personal computers are available for student use – one of the highest proportions in the UK.

Abertay created Embreonix, Scotland's first graduate enterprise centre dedicated to helping students set up their own business. SIMBIOS, the first research centre in Scotland, applies mathematical modeling techniques to environmental and biomedical processes. At the same time Abertay is one of only four universities in Scotland, and the only modern university, rated as Excellent for its teaching of Economics.

The University is conveniently located on a city centre campus. The main buildings, Old College, Kydd Building and others, are in the Bell Street complex grouped around the University's outstanding award-winning Library which is fully networked for the digital age. These buildings house the majority of teaching departments, the University's administrative offices, student refectory, computer centre, research centres, media services and library. There is always a busy atmosphere on this site as students come and go to lectures, meet with staff, study for exams, and attend tutorials and seminars.

Opportunities exist for students to socialize with each other and with members of staff which helps to develop a strong community spirit with good staff/student working relationships. Plans are under way for the creation of a large new Student Centre in the Bell Street complex in the near future.

These features are what make the University of Abertay Dundee special; it is a University where the students count and are given the support they need to help ensure they succeed in their studies.

Follow-up

1. What cities in Ukraine can be considered the leading scientific and student centres? How have they gained such reputation?
2. What higher education establishments in Ukraine are committed to excellence in education and are highly regarded for the quality of their teaching and research?
3. What flexible and innovative approaches to learning are used at the Ukrainian higher education establishments? How do they correspond to the challenging demands of students?
3. What do you know about contacts of your educational establishment with the University of Abertay Dundee? How can you evaluate the results of this cooperation?

IV

Pre-reading

1. What objective reasons and demands stimulate universities authorities to create environmental departments at their educational establishments and deliver courses preparing specialists in this field?
2. What organizations and institutions are involved in the programmes of environmental pollution control and conservation?
3. What disciplines are usually taught while the students are taking some environmental course?

ENVIRONMENTAL COURSES

A national survey carried out during the review and development of the environmental courses at the University of Abertay Dundee showed that organisations involved in environmental pollution control and conservation expect to increase their workforce in the near future. These organisations range from environmental consultants, testing houses and contracting firms to large multinational industrial companies and regulatory agencies. Career opportunities are continually increasing at all levels within the environment industry, and greater pressure is continually being applied on companies to manage their own 'environment' and wastes and to conserve natural resources. The regulatory agencies are also expanding in order to meet the increasingly stringent statutory regulations. The University of Abertay Dundee offers some environmental courses aimed at producing graduates who can become professionals in the field of environmental science.

The first and second years of the course of Environmental Science & Technology develop a strong foundation in the causes and effects of local and global environmental problems, environmental biology and chemistry, ecology and soil science as well as scientific methods of analysis and professional communication. The latter years of the course a high degree of integration between environmental management and technology and science subjects, with appropriate options to allow students to deepen further their knowledge and understanding in either environmental technology or science. Students will gain experience and practice of environmental monitoring, data handling, undertaking environmental impact assessments and environmental analysis, all of which are key skills required by employers. The core themes of the course are Environmental Management Systems; Pollution Science & Technology; Environmental Assessment; Clean-up Technology; Sustainable Development; Conservation; Professional Communication.

Environmental Studies is a broad-based two year full time course leading to the award of a Diploma of Higher Education in Environmental Studies. The programme includes the core of the first two years of the BSc (Hons) Environmental Science & Technology and there are opportunities to progress to this degree course at the end of the first or second year for students who demonstrate the appropriate level of ability required for degree studies. The DipHE is designed to enhance study skills as well as information technology and communication skills. Students who do not wish to proceed to degree level may select optional modules in their second year to help prepare them for employment in their chosen field.

Urban Water & Environmental Management MSc/PGDip and Industrial Environmental Management MSc/PGDip are two postgraduate courses. These courses aim to meet both intellectual and practical needs of professionals involved, or hoping to pursue a career, in managing pollution (both within polluter and regulatory organisations) arising from waste and wastewater disposal. In particular they will extend knowledge of waste and environmental management, as well as developing analytical, problem-solving and decision-making skills. Students will study a range of subjects including environmental systems and impacts, project management, water pollution control, solid waste management, urban drainage systems, environmental quality modelling, environmental policy and regulation, treatment processes and a number of other topics. Some modules have been designed to comply with the syllabi of the CIWEM certificate and Diploma and students may undertake external assessments for these modules to qualify for these awards.

Follow-up

1. Why are the graduates of the environmental courses becoming more and more demanding? What career opportunities can open before them after completing these courses?

2. What knowledge are the students of the course of Environmental Science & Technology provided with during their first and second year of study?
3. How do the students improve and develop their professional background within the second year of the environmental courses.
4. What prospects exist at the university for the students of Environmental Studies to enhance their professional skills?
5. What do the postgraduate courses aim at? What disciplines are of great priority at the postgraduate courses? How can they contribute the general preparation of future specialists?

V

Pre-reading

1. You are going to read about the Urban Water Technology Centre at the University of Abertay Dundee. Are there such centres in Ukraine? What are the activities of these centres?
2. What are the fields of activity of such water technologies centers? Who finances them? Are these private companies or budget organizations?
3. Who are the regular customers of such water technologies centers in Ukraine?
4. What specialists work at such centers? Have you heard of their cooperation with the similar centers abroad? How influential could such cooperation be?

URBAN WATER TECHNOLOGY CENTRE

The Urban Water Technology Centre (UWTC) began through the activities of a group of staff carrying out research and consultancy work associated with wastewater, urban drainage and environmental management. Using the expertise

developed, valuable links between academia and industry have been forged and continue to be expanded providing a unique service to industry.

The centre provides a service to its many clients, partner organizations and individuals in the UK and overseas in research, training and consultancy.

In many projects carried out to date the center has been highly successful in combining academic skills with commercial expertise. A broad range of clients have approached the centre for advice including water companies and authorities, local authorities, central government and private sector companies involved in the construction industry, planning and manufacturing.

The center operates from its own building in the hart of Dundee and this contains offices for all staff. Well-equipped and staffed laboratories are available for a range of chemical and biological testing of samples.

Among the recent projects undertaken by the Urban Water Technology Centre are:

- Monitoring pollutant flows and loads for the Moray Coast PFI sewage treatment scheme.
- Hydraulic model of Fillyside overflow, Edinburgh.
- Development of R-Win, a software package for Sustainable Urban Drainage Systems.
- Design and modeling of upgrading works in the Dunfermline sewerage system.
- Monitoring the environmental effects of a major urban development.
- Technical consultants for the rebuilding of Penicuik sewage treatment works.

The key areas of expertise available in the centre are:

- Computer modelling of drainage and wastewater systems. The center has used the Hydroworks modelling package to design many sewerage systems involving tunnel sewers, storm tanks, pipe duplications and pumping stations.

- SUDS (Sustainable Urban Drainage Systems) design using our own software R-Win which was developed by the centre in collaboration with its German partners.
- Data collection. The center has a comprehensive range of monitoring and sampling equipment for both research and commercial use. The equipment has been installed on some of the most remote islands in the United Kingdom as well as the busiest of city locations.
- Combined Sewer Overflow Studies. Monitoring, modeling and advising many major consultants and sewerage authorities.
- Wastewater Treatment. Many package treatment plants which have been designed now provide treatment for small communities and single developments. The centre has a long-standing relationship with Balmoral Environmental of Aberdeen for developing these plants.
- Project Management. The centre has advised a range of public and private clients.
- Public Attitudes and Behavior. The centre carries out campaigns and studies into the behavior and attitudes of the public about environmental and pollution issues.
- Hydraulic Models. A highly flexible hydraulics rig has recently accommodated a model of a large outfall structure in Edinburgh. This model was built and tested in collaboration with the international consultants Montgomery Watson.

Follow-up

1. How was the Urban Water Technology Centre organized? What were the first activities of this centre?
2. What services does the centre provide?
3. Who are the main clients of the center?
4. Where is the centre located? How are the laboratories of the centre prepared and equipped to meet their orders?

5. What are the main trends of the centre activities in the frames of the recent projects?
6. Speculate about the role of the Urban Water Technology Centre for the economy of the country.

VI

Pre-reading

1. Does the problem of energy consumption in Ukraine demand careful consideration? Why do you think so? How can you prove your opinion?
2. What is the main reason of energy shortage in large industrial cities?
3. Do you have any ideas of how the energy problems are solved in your city?
4. Have you heard of any of the organizations which are involved in energy or ecological projects?

BASIC ENVIRONMENTAL AND ENERGY PROBLEMS IN UKRAINE

The main environmental and energy problems of Ukraine are rooted in its geography and history. Ukraine occupies the area of 605,000 square kilometres that is about 3% of the whole area of the former USSR. However, about 20% of the former USSR's industry was dislocated in Ukraine. Industries are highly dependent on energy and the level of specific energy consumption in Ukraine is higher than in Western countries. Ukraine can cover only 40% of energy demands from domestic sources, the rest is imported. This creates severe energy problems. At the same time existing industries and energy industry itself have a negative impact on the

environment. This causes air, surface and ground water and soil pollution, often to harmful level.

The problems in the field of Environment and Energy are acute in every region of Ukraine. However it seems that the biggest environmental problems are features of cities of East and South Ukraine where about 60% of Ukrainian industries are concentrated. The city of Kharkiv, with its numerous machinery, energy industries and remarkable municipal economy, is the biggest one in the region and the second in Ukraine and may be considered as a model for analyzing environmental and energy problems. It is also large scientific and technology centre, so development of energy saving technologies and measures for protecting environment has been a focal point of activities of a number of research institutions. For example, leading research institutes in the fields of energetics ('Energoproect'), metallurgy ('UkrNDICherMet'), coal-mining and coke-chemical industry ('DIProKoks') as well as environmental protection (Ukrainian Institute of Environmental Problems of the Ministry of Environmental Protection and Nuclear Safety, 'UkrNDIEP') are located in the city. All these institutions together with educational ones, Kharkiv National Academy of Municipal Economy and Kharkiv State Politechnical University, are famous for their innovative developments in the fields mentioned above. As the result, Kharkiv region was selected by the State Committee for Municipal Economy of Ukraine as a pilot region for development, validation and implementation of the advanced energy saving measures with concern to environment.

Ukraine, as young independent country, has declared its adherence to democratic values. Successful transition to democratic society with effective market economy is impossible without solving a set of urgent problems, among which are reconstruction of economy and improvement of environmental quality.

Follow-up

1. What are the main reasons of energy shortage in Ukraine?

2. Why must the energy problems be considered and solved simultaneously with environmental ones?
3. Why was Kharkiv chosen as a pilot region for development, validation and implementation of the advanced energy projects?
4. What research institutes and organizations are involved in energy projects development in Kharkiv?
5. Why is the problem of environmental quality improvement of great priority on the stage of economy reconstruction?

VII

Pre-reading

1. Is there a necessity for the Ukrainian economy to prepare a new generation of environmentalists?
2. What higher education establishments in Ukraine train environmental engineers? What are their graduates career perspectives?
3. What education background does Kharkiv National Municipal Academy provide for the environmental engineers?
4. What have you heard about practical application of scientific work carried by the staff of the Ecological Department of the academy?

ENVIRONMENTAL COURSES

AT KHARKIVE NATIONAL MUNICIPAL ACADEMY

Under conditions of transitional economy and budget limitation, it is very actual for Ukraine to educate new generation of environmental engineers and managers who will devote their knowledge and skills to the development of environmentally sound and energy saving technologies, improvement of decision making process in industry in favour of people needs in safe environment.

There is a broad field for implementation of knowledge and skills of such specialists in Ukraine, because its energetics is based on exploitation of the 42 thermal, 6 hydrolic, 5 nuclear power stations and many small power units, most of

which, especially in East Ukraine, need experts in the field of environmental science, technology and management to solve the problems of their reconstruction and to reduce their negative impact on the environment. For example, the main source of air pollution in Kharkiv region is the Zmiiv Thermal Electric Power Station that is responsible for about 60 % of total emission from all existing regional air pollution sources. Such a situation is resulted from direct operation of the station that mostly uses coal from Donetsk region with high content of sulphur and metal elements. At the same time the station is the main source of electric supply for industrial plants in the region. Another aspect of the problem is the fact that about 70% of the wastewater treatment units of small communities and villages of East Ukraine do not function satisfactory due to lack of energy and that more than thousand of them are to be reconstructed in a way of implementation of energy saving technologies. This also makes possibility of hiring qualified environmental engineering specialists. Moreover, recycling industry in Ukraine is now a point of growth of national economy and a field of implementation of new technologies that are of great importance for building, vehicle, electronic industries, municipal economy and agriculture. One of possible fields of activity for environmental engineers may also be the development of the ecological rehabilitation technologies for the Chernobyl nuclear power station area.

The studying of the Environmental Engineering is organized at a number of technical universities like Kharkiv National Municipal Academy. Despite a pressing need in qualified environmental engineers and managers to find solutions of acute environmental problems, nowadays the academy is still the only institution in Ukraine that has a separate faculty for Urban Environmental Engineering and Management. This faculty focuses on management and the utilization of natural resources as well as on the relation between ecotechnology and society. The basic function of the faculty is to train specialists with a good knowledge of natural sciences and with a high qualification of applied sciences in technologies for municipal economy. The curriculum of the faculty is a combination of management,

engineering and scientific studies. The five departments of the faculty are: Geodesy and Geographic Information Technologies, Chemistry, Urban Environmental Engineering and Management, Natural Gas and Heat Supply, and Water Supply and Natural Water Resource Management.

In 1995 the International Transfer Environmental Technology Centre was established at the Academy as the next step towards focusing on the environment related problems of energetics. The main direction of its activity is promotion of advanced energy saving and environmental technologies transfer in Ukraine from Western countries. The Centre also serves as an educational facility for both graduate and postgraduate students and a place for organizing various scientific and technology workshops and seminars at local and regional levels. Close educational and technological cooperation has been established with partners in the European Union countries such as Finland, the United Kingdom, the Netherlands, Germany. Close scientific cooperation has been developed with such higher educational institutions as the Vaasa Polytechnic in Vaasa (Finland) and the University of Abertay Dundee in Abertay Dundee (Scotland, UK).

Follow-up

1. What factors enhance the necessity to prepare a new generation of environmental engineers and managers in Ukraine?
2. Where can the graduates of ecological departments apply their knowledge and how can they contribute the economy of the country in complicated transitional period in Ukraine?
3. What makes Kharkiv National Municipal Academy special among other similar educational establishments?
4. What are the departments of the Ecological Faculty at Kharkiv National Municipal Academy?
5. When was the International Transfer Environmental Technology Centre created? What tasks does this centre perform?

6. With what European partners does the academy have close educational and technological cooperation?

PART II

LISTENING

Pre-Intermediate level

FRAGMENT I

1. Watch the video sequence without sound. Try to predict what kind of video will be shown. Discuss with your partners where the conversation is taking place, who the people are, what they are talking about.
2. Prepare a list of 15-20 words describing the room and people in the first frozen picture. Use any 5 of your words in the sentences of your own.
3. Watch the video sequence with the sound up to see how accurate your predictions were.
4. Which of the following facts are stated in the sequence? Put a tick if the fact has been mentioned.
 - 1). Mr Brian Coghlan is a consultant of Urban Water Technology Centre.
 - 2). At school Brian was interested in scientific and technological aspects of his studies.
 - 3). Brian entered the University of Abertay Dundee after finishing school.

- 4). Brian Coghlan had been involved in Civil Engineering as a technician before his full-time study as a civil engineer.
 - 5). Because of too much study in Civil Engineering his interest in Municipal Engineering, Public Health, Environmental Engineering became greater.
 - 6). He came back to the University of Abertay Dundee in order to carry a programme of research which was focused on gaining PhD.
 - 7). Brian's research concerned the transport of solids in combined sewage systems.
 - 8). Brian is greatly interested in Hydrolics, Hydrology and Public Health Engineering.
 - 9). Working at the University he has never been involved in any project with Ukraine.
 - 10). Friendship and helpfulness of tutorial staff are the most memorable things of Brian's student life.
5. Watch the video sequence again taking notes of the conversation. Number the stages in Brian Coghlan's career development depending on the order they have been mentioned in the interview.

1). Work of technician in highway construction

- 2). Full time study as a civil engineer

- 3). Interest in scientific and technical aspects of study at school

- 4). Focus on Environmental Engineering

- 5). Interest in Municipal Engineering, Public Health Engineering

- 6). The programme of research focused on gaining the PhD
at the University of Abertay Dundee

- 7). Consulting Engineering with an interest in Hydrolics,
Hydrology, Public Health Engineering,

- 8). A number of posts related to Conventional Civil Engineering

6. Work in pairs. Try to write the dialogue script using your notes.

7. Reproduce your dialogues in pairs.

FRAGMENT II

1. Having seen the first sequence of the interview try to predict what the next sequence could be about. Discuss all possible variants in groups of 4.

2. Watch the video and check up your predictions.

3. Write down a list of interviewer's questions. Develop a list of your own questions that could be included in the interview around the same topic.

4. Watch the sequence again and try to complete the following sentences. Compare your statements with your partner's variants. Discuss your answers with your teacher.
 - 1). In the UK Engineering in general and especially Environmental Engineering is not given the status...

 - 2). On the continent in countries like France and Germany, for instance, engineers are seen to be as important as ...

 - 3). So there are problems in attracting ...

 - 4). On the other hand there are many ...

 - 5). I think my career is only taking off now and I don't think you can ever be ...

- 6). I don't know anyone who works in this field who really ever retires, it's because ...
 - 7). I think you always look for the next ...
 - 8). As far as my own career concern, my plans ...
 - 9). My main interest, apart my family, is ...
5. Do you remember what rewards of the engineering profession Brian mentioned? What can you say about the recognition of the profession of an engineer in your country? Try to name some of the profession rewards.
 6. Discuss the behaviour of Brian during the interview, his voice and gesture. Analyse what he has told about his present carrier, hobbies, interests. Try to focus on his personality. Describe what sort of person he is.
 7. Try to interview your partner to find out as much information as possible about his or her personality.

FRAGMENT III

1. You are going to watch a sequence where Brian Coghlan is speaking about his centre activities around different ecological problems. Before you watch the video speculate about the activities of such centres in Ukraine.
2. Watch the sequence carefully and try to answer the following questions:

- 1). What are the main areas of Urban Water Technology Centre activity?
 - 2). What large new contract does the centre have?
 - 3). What is the aim of the on-going project funded by the government?
 - 4). In what activity is a large number of centre personnel engaged?
 - 5). What are the other tasks of the centre apart from environmental monitoring?
 - 6). What sort of activity has Brian been engaged in recently?
 - 7). What are Brian's responsibilities in the centre?
 - 8). What is Brian planning to do in the nearest future being involved in Tempus Tacis project? What tasks does he perform in the frames of this project?
 - 9). Why do you think the government funds environmental programmes? Is it the field of priority for the country's policy?
3. Tick what subjects Brian teaches and mentioned in the interview.

Hydrology

Wastewater Treatment

Hydrolics

Public Health Engineering

Project Management

Air Quality

Public Attitudes and Behavior

Climate Change

4. Watch the sequence again taking notes about the main activities of the centre. Prepare a list of special words and expressions used in the conversation. Discuss and guess the meaning of unknown words. Use the dictionary if it is necessary.

5. Fill in the gaps in the following statements from the interview:
 - 1). The area where includes environmental monitoring.

 - 2). Large number of personnel are engaged in for analyzing and monitoring sewage flows.

 - 3). My main task involves..... and teaching.

 - 4). I'm involved in construction and hydraulic module.

 - 5). I became involved in project.

6. Write down a brief summary of Urban Water Technology Centre activities and projects it is involved in.

7. Focus your attention on the extract where the interviewer and interviewee are talking about British – Ukrainian links. What participants of the project from

both sides have been mentioned in the discussion? How fruitful was their work abroad?

8. Answering the interviewer's question on how the Ukrainian young participant of the project differs from the Scottish youth, Brian Coghlan stresses that people are the same in different countries, there are just differences in the way people communicate. What is your point of view on this issue?

In groups of 4-5 try to discuss the behaviour of interview participants, their manner to present information and communicate. How different are they as representatives of different countries and different cultures? Speculate on the value of cross-cultural education in successful business communication.

FRAGMENT IV

1. You are going to watch a sequence where the interviewer and Brian Coghlan are talking about environmental issues. Try to name at least some of the global problems of environmental concern that acute worldwide. Speculate in groups of 4-5 what problems can be touched in the interview.
2. Watch the sequence carefully, read the statements below and recollect in your memory whom they belong to – the interviewer (I) or Brian Coghlan (B):
 - 1). Now when we are witnesses of discrepancy, misbalance between human big demands and resources of nature, I think it's necessary to think about future assistance. ()
 - 2). I would hope that they would, in their personal lives, contribute in some

- small way to the improvement of the environment to make our world more sustainable. ()
- 3). The only one way is to make small contribution, together we can really make a big contribution. ()
- 4). Now, when we speak about any domain of knowledge, we use the word 'sustainable'. ()
- 5). 'Sustainable' or 'sustainability' is the word which is used by the politicians in a different way that the environmentalists use it. ()
- 6). For me 'sustainability' means trying to save what we have for future generations. ()
- 7). It doesn't mean slowing down the real way we consume all our resources of the planet, it means preserving our resources. ()
- 8). That is the aim that, I think, we never rich. We have to be realistic, we can never achieve sustainability with a population we have. ()
- 9). Aiming at the achievement of sustainability we think about healthy land, we'll conserve the beauty of the Universe, Ukraine, Scotland, worldwide. ()
- 10). Within that small country we have quite large areas of beautiful countryside and we want to maintain them. ()
- 11). We are surprised that you've conserved your country like a fairy tail. ()

12). This country has achieved such high level of technology. ()

13). It's very important to give our children these opportunities to see more,
to compare, and to value our common treasures. ()

3. Watch the sequence again and summarize in short what Brian Coghlan says about the necessity to preserve environment for future generation and everybody's contribution to achieve this goal.

4. Try to find in the interview how the representatives of two different cultures speak about Ukraine and Scotland.

| | Ukraine | Scotland |
|---------------|---------|----------|
| Interviewer | | |
| Brian Coghlan | | |

How do these words demonstrate the attitude of these people to their countries and to common values of the world?

5. Speculate about the role of such meetings and discussions for the development of scientific cooperation between different countries. In what way can such discussions stimulate the process of joining efforts to preserve the world's environment.
6. Would you like to participate in any joint project? How important could such experience be for your future career? How can you contribute and what can you gain from such participation?

Upper-Intermediate level

EXTRACT ONE

Brian Coghlan is talking about his early career.

BEFORE YOU LISTEN AND WATCH

1. Brian Coghlan is a consultant at the urban water technology centre in the University of Abertay Dundee. But he had had a different job before he started his current position. What do you think it was? Choose two jobs which you think are most likely, and the two which are least likely. Give reasons for your answers.

Vet

Technician
English teacher
Civil engineer
Nuclear physicist
Lawyer

2. Think of any questions you would like to ask Brian if you were interviewing him. Discuss the questions.

GENERAL VIEWING

3. Listen to the tape, and answer the question.

Were you right about Brian Coghlan's previous occupation?

4. Listen and follow the video sequence to see if your questions were answered.

5. Work in pairs. Agree on the adjectives below that best describe Brian Coghlan's style of talking (use a dictionary if you don't know the meaning of any of the words).

well-informed

thoughtful

pompous

pedantic

incomprehensible

persuasive

frank

light-hearted

DETAILED VIEWING

6. Listen to the extract again, several times if necessary and decide which words Brian actually uses in the following sentences:

1. My studies.....became more focused on environmental engineering.
2. I became a graduate in.....

7. Answer these questions:

1. What were Brian's interests when he was a schoolboy?
2. What led him to become involved in civil engineering industry, first as a technician?
3. How did he come back to the University of Abertay Dundee?
4. What really set him on the road on which he is now?

FOLLOW-UP:

DISCUSSION

8. Viewing backwards, take some notes and give a brief summary of Brian's Curriculum Vitae, using the data from the video material.

9. Find this extract in the video text and try to personalise the sound track.

Do you agree or disagree with Brian?

“The studies really don’t give you information, but they give you meanings to find them more for yourself. They show you how you can learn, because you never stop learning”.

10. Watch the videocassette without sound and try to check what you remember, making pauses and comparing your answers.

EXTRACT TWO

CURRENT AND FUTURE CONCERNS

LEAD-IN EXERCISES:

1. You have got a preliminary information about Brian Coghlan. Could you guess what is of special interest for him in his professional life?
2. Could you admit that :
 - ...the profession of an engineer is not so popular nowadays worldwide as it was some decades ago?
 - ... the job of a environmental engineer might seem glamorous to some people.
3. What could be Brian’s opinion concerning these issues?
4. What occupations are popular and highly recognised in your country?

GENERAL VIEWING

5. Find evidence in the video material that proves you were right predicting the correct answers. Pause and basing on visual data give a brief commentary.

DETAILED VIEWING

6. Look at the following sentences. Listen and view again, and write down the words that Brian Coghlan actually uses .

Environmental engineering is not given theit deserves.

We are not seen as professionals of the same recognition as doctors or lawyers.

In the UK the status ofis not so high as it should be.

So, there are problems in attracting thepeople in this sphere.

You canbe satisfied with your career.

I think that my career is onlynow.

You always look for the next

Special plan is to continue working in this field and spend more time with

As far my career concerned, my plansevery year.

7. Listen and watch again very carefully what Brian Coghlan says about his concerns. Finish the following sentences:

My main interest is –

I spent many years walking—

You plan for one year and ---

8. Summarising the information you have got about Brian Coghlan, try to fill up the following table:

ATTAINMENTS

EDUCATION

EXPERIENCE

GENERAL INTELLIGENCE

SPECIAL INTERESTS

DISPOSITION

9. In pairs, imagine one of you is Brian and one of you is interviewer. Try to find out Brian's future plans. Think carefully about appropriate questions that will help you to get required information. Make notes and use them while interviewing.

EXTRACT THREE

CENTER ACTIVITIES AND BRIAN COGHAN'S INVOLVEMENT

LEAD-IN:

1. Before you view the videocassette, try to insert the following technical terms into the sentences below:

Hydraulic Equipment Treatment Environmental Monitoring

1. We have a comprehensive range of ----- and sampling equipment for both research and commercial use.

2. We carry out campaigns and studies into the behaviour and attitudes of the public about ----- and pollution issues.

3. Our-----has been installed on some of the most remote islands in the United Kingdom .

4. Our highly flexible -----rig has recently accommodated a model of a large outfall structure in Edinburgh.

5. Many package treatment plants which we have designed now provide ----- for small communities and single departments.

LISTENING 1

2. As you listen and view the first time try to decide if the following sentences are true or false.

1. We really are not a national centre for expertise in this area.

2. Long ago I was involved in constructing and testing hydraulic model of Filyside overflow.

3. People are quite different really.

4. In the framework of the Tempus Tacis Project I will be involved in producing teaching materials for the course.

5. We teach a range of economical subjects.

LISTENING 2

3. Now listen and view again with more attention to find out what recent projects were mentioned in the interview. Tick (*) those projects which Brian names, and cross (x) the others.

Monitoring pollutant flows and loads for the Moray Coast PFI sewage treatment scheme. ()

Hydraulic model of Filyside overflow, Edinburgh. ()

Development of a software pack for Sustainable Urban Drainage Systems. ()

Technical consultants for the rebuilding of Penicuik sewage treatment works. ()

Design and modelling of upgrading works in the Dunfermline sewerage system. ()

Monitoring the environmental effects of a major urban development. ()

FOLLOW-UP WORK

Deduce a dialogue from the frozen picture. Add information from the given above material. Work in pairs. One of you should imagine that he is talking to Brian after his interview. Ask questions to find out about:

1. The Tempus Tacis Project
2. Links between Scotland and Ukraine.
3. Scottish and Ukrainian participants of the Project.

EXTRACT FOUR

ENVIRONMENTAL ISSUES

1. We are going to hear a conversation concerning environmental issues. What do you predict Brian will say about?

Are environmental problems of great concern in your country?

Please, name the most crucial ones.

2. Before you view the extract, look through the following sentences that you will hear in this part. How do you think each of these sentences finishes?

But aiming at sustainability we will conserve a healthy land and beauty of the

Currently when we speak about any domain of knowledge we use a word

Preserving resources we can never achieve sustainability with....

We have small and small parts of the world. It is important to preserve these.....

3. Look at the following sentences. Put (+) by the ones you might expect to hear in the interview, and (-) by those you would not expect to hear. Then compare your answers with those of a partner. Discuss any differences.

The EU urban waste-waters treatment directive, adopted in 1991, has been the major reason for expenditure on sewage treatment throughout the UK.

Customs declarations are not a problem for the publisher.

The need for special documentation is printed by the computer on the invoice.

The central focus for protecting bathing waters is the EU bathing water directive. This was adopted on 10 December 1975 with 10 years for the standards prescribed for bathing waters to be met, unless derogations were granted.

I hope that a generation to come will contribute in some way to the improvement of the environment.

4. What did Brian say? Look at the list of statements above. Find summary(summaryes) of statements actually made by Brian. Watch the video sequence again and mark it (them).

5. Normal spoken English contains a mixture of false starts, repetition, incomplete sentences. Watch the video, listen to the sentences on the recording, and note on the table below which sentences contain false starts or repetitions, and whether the sentences are incomplete.

| FALSE START | REPETITION | INCOMPLETE |
|-------------|------------|------------|
| 1. | | |
| 2. | | |
| 3. | | |
| 4. | | |
| 5. | | |

6. Listen for the extract again. Who makes each of the following remarks? Say what the importance, or function, is of the words used in the sentences.

| Remark | Speaker | Speaker's purpose |
|---|---------|-------------------|
| 1. Oh, I hope that they will contribute in some small way to the improvement of the <i>environment</i> . | | |
| 2. The word ' <i>sustainability</i> ' is used by politicians in different way than environmentalists use. | | |
| 3. What would you wish future participants of the <i>Project</i> ? | | |
| 4. We are currently witnessing a discrepancy between human being's demands and <i>nature resources</i> . | | |

FOLLOW-UP WORK

Brian mentions that we will never actually achieve sustainability in environmental domain. Watch the video sequence and name the reasons that predetermine it.

What is your opinion? Do you agree or disagree with him?

Please give comments on video pictures dealing with this issue. You can practise in class with a partner by taking it in turns to be the interviewer and use split pictures as a useful source of data. Remember to use your imagination and your experience.

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