# SCI-CONF.COM.UA

# SCIENCE AND EDUCATION: PROBLEMS, PROSPECTS AND INNOVATIONS



PROCEEDINGS OF VII INTERNATIONAL SCIENTIFIC AND PRACTICAL CONFERENCE APRIL 1-3, 2021

**KYOTO 2021** 

# SCIENCE AND EDUCATION: PROBLEMS, PROSPECTS AND INNOVATIONS

Proceedings of VII International Scientific and Practical Conference Kyoto, Japan

1-3 April 2021

Kyoto, Japan 2021

## **UDC 001.1**

The 7<sup>th</sup> International scientific and practical conference "Science and education: problems, prospects and innovations" (April 1-3, 2021) CPN Publishing Group, Kyoto, Japan. 2021. 1135 p.

# ISBN 978-4-9783419-5-2

# The recommended citation for this publication is:

Ivanov I. Analysis of the phaunistic composition of Ukraine // Science and education: problems, prospects and innovations. Proceedings of the 7th International scientific and practical conference. CPN Publishing Group. Kyoto, Japan. 2021. Pp. 21-27. URL: <a href="https://sci-conf.com.ua/vii-mezhdunarodnaya-nauchno-prakticheskaya-konferentsiya-science-and-education-problems-prospects-and-innovations-1-3-aprelya-2021-goda-kioto-yaponiya-arhiv/">https://sci-conf.com.ua/vii-mezhdunarodnaya-nauchno-prakticheskaya-konferentsiya-science-and-education-problems-prospects-and-innovations-1-3-aprelya-2021-goda-kioto-yaponiya-arhiv/</a>.

# Editor Komarytskyy M.L.

Ph.D. in Economics, Associate Professor

Collection of scientific articles published is the scientific and practical publication, which contains scientific articles of students, graduate students, Candidates and Doctors of Sciences, research workers and practitioners from Europe, Ukraine, Russia and from neighbouring coutries and beyond. The articles contain the study, reflecting the processes and changes in the structure of modern science. The collection of scientific articles is for students, postgraduate students, doctoral candidates, teachers, researchers, practitioners and people interested in the trends of modern science development.

e-mail: kyoto@sci-conf.com.ua

homepage: <a href="https://sci-conf.com.ua">https://sci-conf.com.ua</a>

- ©2021 Scientific Publishing Center "Sci-conf.com.ua" ®
- ©2021 CPN Publishing Group ®
- ©2021 Authors of the articles

# TABLE OF CONTENTS

1.	Belichenko I. S., Kostinsky G. B. ON TEACHING HUMAN MORPHOLOGY IN NON-STATE	16
	UNIVERSITIES OF UKRAINE.	
2.		21
۷.	Bobrovnyk S. V. ANTHROPOLOGICAL ASPECTS OF MODERN JURISPRUDENCE.	<i>L</i> 1
2	Bobrovnyk S. M., Ovcharenko Z. P.	27
3.	EXPANDING VOCABULARY IN ENGLISH CLASSES WITH REGARD	21
	TO PROFESSIONAL ORIENTATION.	
1		22
4.	Bogatko A. F., Bogatko N. M., Mazur T. G., Dyman T. M., Bogatko L. M.	33
_	GRAIN QUALITY CONTROL USING THE ADVANCED METHOD.	39
5.	Bogun M. V., Alyieva S. V.	39
	DIAGNOSIS OF THE DISEASE USING 3-D FACIAL ANALYSIS.	42
6.	Chervonenko O.	42
	ROLE AND FUNCTIONS OF THE INTERVIEWER IN A	
	MOCKUMENTARY INTERVIEW. (BASED ON THE SITCOM TWENTY	
7	TWELVE).	
7.	Gaystruk N., Nugzar-Petre Chiaberashvili, Gaichenya I., Pryshchenko Yu.,	52
	Myronchenko K.	
	SOCIO MEDIA ART THERAPY AS A WAY OF PREVENTING AND	
	MINIMIZING THE STRESS-EFFECTS IN A GLOBAL PANDEMIC	
	CONDITIONS IN WOMEN OF REPRODUCTIVE AGE, WHICH	
	BELONG TO RISK GROUPS.	
8.	Goshchynsky V., Goshchynsky P., Lugovyi S.	60
	THE ANALGETIC EFFECT OF PRP-THERAPY IN CRITICAL LOWER	
	LIMBS ISCHEMIA.	
9.	Hladka O. V.	70
	COMMUNICATIVE APPROACH TO TEACHING "MODAL VERBS".	
10.	Kabylbekova A. G., Ustenova G. O.	73
	TECHNOLOGY FOR OBTAINING SURGICAL SUTURE MATERIALS.	
11.	Kalynets K.	79
	ADVERTISING AT SOCIAL NETWORKS: EVALUATION OF	
	STUDENTS' ATTITUDES TO IT.	
12.	Kopach O. Ye., Yurchyshyn O. M., Melnyk N. A., Fedoriv O. Ye.,	84
	Sopel O. M., Lototska O. V., Krytska H. A., Bilucha A. V.	
	INFLUENCE OF SEVERE TRAUMA ON MORPHOLOGICAL	
	CHANGES OF LIVER TISSUES AGAINST THE BACKGROUND OF	
	COPPER AND ZINC SALT POISONING.	
13.	Kornytska Yu.	92
	DESIGNING WEB-QUESTS: PRACTICE.	
14.	Leshchynskyi V. P.	98
	REQUIREMENTS FOR THE DOMAIN NAMES OF ENTERPRISES IN	
	INNOVATIVE CONDITIONS.	

15.	Luniaka K. V., Kliuiev O. I., Rusanov S. A., Kliuieva O. O. RESEARCH OF HEAT INTERCHANGE IN CENTRAL AND	101
	PERIPHERAL PIPES OF THE HEAT EXCHANGER.	
16.	Maksymova I. O.	108
	CASE STUDIES AS AN EFFECTIVE METHOD IN TEACHING	
	ENGLISH.	
17.	Malyk N., Kharchenko E.	118
	COLITIS AND ENTERITIS IN PATIENTS WITH COPD.	
18.	Martynova I. E.	120
	EXTRACURRICULAR WORK AS A FORM OF STUDENT	
	ORGANIZATION.	
19.	Mikhailiuk S.	125
	FORMS OF COMMUNICATION IN OFFICIAL DISCOURSE.	
20.	Moroz D.	128
	NUMERICAL-ANALYTICAL METHOD FOR DISTRIBUTED	
	MODELING OF APPLIED TASKS.	
21.	Mychlo I.	137
	THE PROBLEM OF CREATIVE REALIZATION OF A MUSICIAN IN	
22	MODERN JAZZ CULTURE.	1.11
22.	Nechytailo L. Y., Nechytailo N. O., Kryvoviaz O. S., Danyliv S. I.	141
	USE OF NATURAL SORBENT FOR PURIFYING WATER FROM	
22	CADMIUM IONS.	147
23.	Quliev Revan Velish oglu, Abbasova Aygun Khanlar qizi	14/
	ON NON-REGULAR SPECTRAL PROBLEM AND QUASI- POLYNOMIALS, CONNECTED WITH THEM.	
24.	Razakova B. S.	152
∠ <b>4.</b>	HUMAN RESOURCE MANAGEMENT IN AGRICULTURAL SECTOR	132
	AND ITS SPECIFIC FEATURES.	
25.	Rusnak V., Rusnak N.	156
23.	PSYCHOLOGICAL SAFETY EDUCATIONAL ENVIRONMENT.	130
26.	Sakhanda I., Lobchenko K.	160
<b>-</b> 0.	THE IMPORTANCE OF TREATMENT OF PYELONEPHRITIS.	100
27.	Samolenko T., Yanchenko I.	163
27.	MASTER'S DEGREE PRACTICE SPECIALITY-PHYSICAL	
	EDUCATION IN HIGHER EDUCATIONAL INSTITUTIONS.	
28.	Syrova G. O., Lukianova L. V., Petiunina V. M.	165
	UNITY OF EDUCATION AND SCIENTIFIC RESEARCH – THE MAIN	
	PRINCIPLE OF KHARKIV NATIONAL MEDICAL UNIVERSITY.	
29.	Vezirishvili-Nozadze Ketevan, Jishkariani Maka, Pantskhava E.	175
	IMPACT OF CLIMATE CHANGE ON GEORGIA'S ENERGY SECTOR -	
	VULNERABILITY AND ADAPTATION.	
30.	Vodolaskova K.	184
	ADAPTATION OF UKRAINIAN LEGISLATION IN THE FIELD OF	
	COMBATING CLIMATE CHANGE AND PROTECTING THE OZONE	
	LAYER FROM THE NEGATIVE IMPACTS OF CIVIL AVIATION.	

# **UDC 378.147**

### CASE STUDIES AS AN EFFECTIVE METHOD IN TEACHING ENGLISH

# Maksymova Iryna Oleksandrivna

senior lecturer
Department of Pedagogy
Foreign Philology and Translation
Simon Kuznets Kharkiv National
University of Economics, Kharkiv

Abstract: The work deals with the analysis of the application of the case studies method for teaching the professional English language. The work reveals case studies as an appropriate research design to gain concrete, contextual, in-depth knowledge about a specific real-world subject. It is stressed that this innovative methodology allows to study the key characteristics, meanings, and implications of the case. Case studies method is considered for teaching English as a foreign language at Economic Universities. A wide range of educational challenges and opportunities such as group working, individual study skills, information gathering and analysis, presentation and practical skills, time management is highlighted in the work.

**Keywords:** case studies method, communicative approach, English language, innovative teaching methods, higher school, problematic active grounds of training.

Nowadays modern society places new demands on the quality of professional grounding. It requires experts with a high level of theoretical knowledge and practical skills sufficient for creativity in a definite professional field. Modern education is focused mostly on the development of the cognitive potential of the individual, enhancing the ability to learn and the development of the creative abilities of the individual. Doubtless, it is necessary to find out effective ways of improving the curriculum, particularly methods and approaches to teaching at higher school

institutions.

Modern methodology of teaching English as a foreign language is a flexible and expanding informative educational environment in which, along with the traditional approach to teaching, there is increasing interest in new educational approaches, pedagogical innovations, technologies and methods.

Case studies method is an effective approach for teaching English as a foreign language at non-philological institutions. Speaking about teaching English at non-philological institutions it is undeniable that the problem of motivation to learning English exists. The motivation of students in learning English is low [5, p.p.19-27]. It is a challenge for teachers to find out the ways and approaches of making educational process in English interesting and effective. The process of learning a foreign language is a more natural one, similar in many ways to that which occurs when learning the native language. It is a well-known fact that there are many modern approaches to teaching English as a foreign language. For example, such as communicative approach, project planning, case studies. There are many other methods used in foreign language teaching, but it is rare to find one technique being used without influence from the others. Anyway, all of them have the aim to provide the student with the chance to use language to communicate, so role play is a popular teaching method. Either way, the role of the teacher is to facilitate rather than dominate and the students are active participants rather than passive learners.

Case studies is an effective way of teaching English as a foreign language at the non-philological institution. Case studies have been popular since the early part of the 20-th century when faculty members at Harvard Business School responded to a lack of textbooks in the field by writing up descriptions of real business scenarios for their students to explore [2, p.p. 26-30].

Case studies method is defined as an innovative method of training students at higher schools, which forms the necessary knowledge, skills and activities for future professionals. In fact, case studies present students with real-life scenarios that they might face in their chosen fields and then ask them to use what they have learned in their coursework to analyze the problem and recommend solutions. Case studies also

now frequently appear in the curricula of law, medical, economic schools. The case method is directed to the solution of a definite specific problem, but this problem is not presented ready-made, it is formulated by the teacher depending on the real training situation. The current problem is defined during the teaching process of a special aspect of a professional foreign language (grammar, lexical training or communication) training process.

Analysis of recent research and publications is made by Y. P. Surmin, D. L. Rogers, D. Brown, J. C. Richards, Thomas S. C. Farrell, R. Benbunan-Fich, S. R. Hiltz, N. V. Akinfieva, O. V. Bobienko and others, showed the problems facing the case studies method implementation in the process of teaching higher school students. There is described the origins of the case method as it appeared in business and economics training. Later on it was modified for humanitarian training, though many elements of the case studies had been used in language teaching as situational exercises. At present, there are numerous controversies between the necessity of implementation of innovative methods of training and the absence of elaborations concerning the case studies method. Some of them are as follows: 1) lack of theoretical works concerning the use of the case studies method in teaching English; 2) absence of theoretical grounding and description of the process of buildingup a training methodical case with the necessary element, such as algorithm, integrating the context of this process and its psychological and pedagogical aspect. The above described controversies make it possible to formulate and frame out the context of the problem under analysis, namely the necessity of theoretical grounding and practical implementation of the case studies method into the training process of building up the methodological competence of the professional English language teachers and gaining practical skills by their students. There should be studied the hypothesis that the process of formation of the methodological competence of the English language teachers and, correspondingly, acquisition of the practical skills by the students will be more efficient provided the case studies method is implemented and directed to the development of the analytical-constructive and organizational skills and abilities [3].

Case studies method is expected to be widely used in teaching English as a

foreign language as well. Unlike traditional lecture-based teaching, where student's participation in the class is minimal, the case study method is an active learning method which requires participation and involvement from students. For future specialists, who have been exposed only to the traditional teaching methods, this requires a major change in their approach to learning. It should be stressed that case studying methodology is effectively used at higher education institutions as a means of a certain theme presentation and study.

Case study is a specific approach to solving educational problems. Thus, the essence of the method is to understand, critically analyze, and solve specific problems or cases. The case study provides a description of the situation that occurred in a particular practice and contains a certain problem that requires a solution. It is a straight way for the students to be introduced to the training a practical situation of the real life to be discussed and provide an informed decision based on using knowledge and skills, meanwhile improving it [4, p.p. 217-228].

Teaching a foreign language, teachers should bear in mind that many students are more inductive than deductive personalities, which means that they learn better from examples than from logical development starting with basic principles. The use of case studies can therefore be a very effective classroom technique. Whether to use a simple scenario-type case or a complex detailed one depends on the teacher's course objectives. Most case assignments require students to answer an open-ended question or develop a solution to an openended problem with multiple potential solutions. Requirements can range from a one-paragraph answer to a fully developed group action plan, proposal or decision.

Most standard cases have these common elements, such as: a decision-maker who is grappling with some question or problem that needs to be solved; a description of the problem's context (a law, an industry, a family, everyday situation); supporting data, which can range from data tables to links to URLs, quoted statements or testimony, supporting documents, images, video, or audio [1].

Case assignments can be done individually or in teams so that the students can brainstorm solutions and share the work load. A major advantage of teaching with

case studies is that the students are actively engaged in figuring out the principles by abstracting from the examples. This develops their skills in: 1) problem solving; 2) analytical tools, quantitative and/ or qualitative, depending on the case; 3) decision making in complex situations; 4) coping with ambiguities; 5) learning communication with people of various groups [5, p.p.30-33].

In the most straightforward application, the presentation of the case study in class establishes a framework for analysis. It is helpful if the statement of the case provides enough information for the students to figure out solutions and then to identify how to apply those solutions in other similar situations. Teachers may choose to use several cases so that students can identify both the similarities and differences among the cases. An innovative approach to the case analysis might be to have students role-play the part of the people involved in the case. This not only actively engages students, but forces them to really understand the perspectives of the case characters. Videos or even field trips showing the venue in which the case is situated can help students to visualize the situation, which they need to analyze [2, p.p. 248-253].

In order to motivate the students to complete the assignment before class as well as to stimulate attentiveness during the class, the teacher should grade the participation—quantity and especially quality—during the discussion of the case. This might be a simple check, check-plus, check-minus or zero. The teacher should involve as many students as possible. In order to engage all the students, the teacher can divide them into groups, give each group several minutes to discuss how to answer a question related to the case, and then ask a randomly selected person in each group to present the group's answer and reasoning.

The case studies method is a widely used style of teaching that involves problem-based learning and promotes the development of analytical skills. By presenting content in the format of a narrative accompanied by questions and activities that promote group discussion and solving of complex problems, case studies facilitate development of the cognitive learning; moving beyond recall of knowledge to analysis, evaluation, and application. Similarly, case studies facilitate

interdisciplinary learning and can be used to highlight connections between specific academic topics and real-world societal issues and applications. This has been reported to increase student motivation to participate in class activities, which promotes learning and increases performance on assessments. For these reasons, case-based teaching has been widely used in business and medical education for many years. Although case studies were considered a novel method of science education just 20 years ago, the case study teaching method has gained popularity in recent years [3].

In the most straightforward application, the presentation of the case study establishes a framework for analysis. It is helpful if the statement of the case provides enough information for the students to figure out solutions and then to identify how to apply those solutions in other similar situations. Instructors may choose to use several cases so that students can identify both the similarities and differences among the cases.

Depending on the course objectives, the instructor may encourage students to follow a systematic approach to their analysis. An innovative approach to case analysis might be to have students role-play the part of the people involved in the case. This not only actively engages students, but forces them to really understand the perspectives of the case characters. Videos can help students to visualize the situation that they need to analyze.

The case method combines two elements: the case itself and the discussion of that case. A teaching case is a rich narrative in which individuals or groups must make a decision or solve a problem. A teaching case is not a "case study" of the type used in academic research. Teaching cases provide information, but neither analysis nor conclusions. The analytical work of explaining the relationships among events in the case, identifying options, evaluating choices and predicting the effects of actions is the work done by students during the classroom discussion [1].

Decision cases are more interesting than descriptive ones. In order to start the discussion in class, the instructor can start with an easy, noncontroversial question that all the students should be able to answer readily. However, some of the best case

discussions start by forcing the students to take a stand. Some instructors will ask a student to do a formal "open" of the case, outlining his or her entire analysis. Others may choose to guide discussion with questions that move students from problem identification to solutions. A skilled instructor steers questions and discussion to keep the class on track and moving at a reasonable pace.

In order to motivate the students to complete the assignment before class as well as to stimulate attentiveness during the class, the instructor should grade the participation quantity and especially quality during the discussion of the case. This might be a simple check, check-plus, check-minus or zero. The instructor should involve as many students as possible. In order to engage all the students, the instructor can divide them into groups, give each group several minutes to discuss how to answer a question related to the case, and then ask a randomly selected person in each group to present the group's answer and reasoning.

Cases can involve situations in which decisions must be made or problems solved, or they can involve evaluation or reconsideration of existing policies, practices or proposals. Effective cases are usually based on real events, but can be drawn from both the present and the past, even the distant past. Cases require students to make choices about what theory or concepts to apply in conducting the analysis, which is distinct from the one to one correspondence between theory and application that they see in their textbooks or hear in lectures [6, p.p. 57-88].

# The special features of the case study method are:

- 1. Cases are real and compel students to work on real world problems that are complicated and messy. Those complications force students to hone their skills in finding and using evidence, choosing which concepts, theories and methods are relevant, and ignoring irrelevant material, no matter how interesting it may seem.
- 2. Cases are big. Written cases are longer than most other kinds of active learning exercises and take more time for students to prepare and for classes to discuss. Cases often have many parts and reflect many points of view, require analyses that involve several steps and involve a variety of kinds of intellectual tasks. Case discussion is public [7, p.p. 435-454].

In a case discussion, students "do" the work of the discipline, rather than watch or read about how it is done by others. By engaging in the case, students apply the concepts, techniques and methods of the discipline and improve their ability to apply them. Case discussions bring energy and excitement to the classroom, providing students with an opportunity to work with a range of evidence, and improving their ability to apply the vocabulary, theory and methods they have learned in the course. Introducing the case method, like any change in pedagogical practice, represents an investment of faculty time and energy. Is the investment worth it? I think so, but it is worth thinking about the case method relative to some alternatives, and considering the benefits and costs of introducing it [8].

Case discussions, in the whole class or in small groups, help students learn effective listening and response skills, push them to present clear and reasoned arguments and enhance public speaking skills using a foreign language. They provide an opportunity for students to learn from each other, which gives them the opportunity to take ownership of their learning. From the faculty perspective, case discussion provides a great opportunity for on-the-spot assessment of student learning, since the discussion reveals information about individual student's mastery as well as a sense of the gaps in the whole group's learning. The basic requirements for a successful case teaching experience are: 1) an appropriate case; 2) students who are prepared to engage with the material in a discussion; 3) an instructor who knows the case, has a plan for the discussion, and is ready to deal with the unexpected.

To be most effective, use of the case method should be embedded in the course syllabus, so that learning to learn in this way is one of the objectives of the course, and students have ample opportunity to practice their skills as case discussants.

What is more, for future graduates to feel confident in real-life situations and in the classroom, they should be placed in an environment in which, with the help of a foreign language, they would be able to solve the problem themselves. Using case studies like a classroom activity in teaching English as a foreign language at nonphilological institutions occurring a definite professional environment, such as Business English, English for managers, English for lawyers, English for economists, English for professionals in the field of advertising, for specialists in public relations, pursues two complementary objectives. They are improving communicative competence (linguistic and sociocultural) and are contributing to the formation of the professional qualities of the students [6, p.p. 134-136].

Classroom communication related to the work on the case is represented in the form of dispute, discussion, argument, description, comparison, persuasion, and other speech acts. Such activity directly develops and trains skills of the right strategy of verbal behavior, norms, and rules of the English-language communication [8]. Therefore, the particular method provides both cases and a particular type of educational material and the special methods for its use in educational practice English.

Case studies are recommended for teaching English the elder students as it is necessary for participants to have a definite amount of knowledge and skills. It is evident that a particular approach for teaching English promotes analytical, managerial, decision-making skills, interpersonal skills, creativity, oral and written communication skills in English. It also provides the ability to analyze a situation, evaluate alternatives, and choose the best option to make a plan for its implementation. If during the academic year, this method is applied systematically, the students will develop their knowledge in English and get rid of language barrier improving their English speaking skills in real-life practice [3].

In conclusion, there is a wide range of educational challenges and opportunities of case studies, such as: – the acquisition of new knowledge and the development of general ideas; – the development of students' critical thinking and the ability to listen to and consider an alternative point of view to express their arguments; – presentation skills; – the development of the ability to work in a team; – time management; – the development of skills in finding the most efficient solution to the problem and predicting the possible result. It should be noted that using the case studies should be methodically, organizationally, and pedagogically proved and secure.

## **REFERENCES**

- 1. Benbunan-Fich R., Hiltz S. R. Educational Applications of CMCS: Solving Case Studies through Asynchronous Learning Networks / R. BenbunanFich, S. R. Hiltz. JCMC, 1999. № 4 (3). March 1999 [Electronic resource]. Access mode: http://www.ascisc.org/jcmc/vol4/issue3/index.htmml
- 2. Brown D. Teaching by Principles: an Interactive Approach to Language Pedagogy. 2-nd edition / D. Brown. Addison Wesley; Longman, 2001. 480 p.
- 3. Case Studies for ESL Teachers [Electronic resource]: Cambridge English, 2017. -Access mode: www.cambridgeenglish.org/
- 4. Kreber C. Learning Experientially through Case Studies. A Conceptual Analysis Teaching in Higher Education, 2001. Vol. 6 No. 2. P. 217–228.
- 5. Rogers D. L. A Paradigm Shift: Technology Integration for Higher Education in the New Millennium / D. L. Rogers // Educational Technology Review.

   Spring/Summer, 2000, № 13. P. 19–33.
- 6. Richards J. C., Farrell Thomas S. C. Professional Development for Language Teachers (Strategies for Teacher Learning) / J. C. Richards, Thomas S. C. Farrell. Cambridge University Press, 2005. 202 p.
- 7. Stake R. Case studies. In N.K. Denzin, Handbook of qualitative research (2nd ed.). Thousand Oaks, CA: Sage, 2000.- P. 435–454.
- 8. Teaching materials using case studies [Electronic resource]: UK Centre for Materials Education, 2017. Access mode: http://www.materials.ac.uk/casestudies.