

# Modelling System in Education for Example of the E-Learning

Semernia Oksana

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## Modelling System in Education for Example of the E-Learning

Oksana Semernia Assoc. Prof. Dr. of Department of Ecology, Kamianets-Podilskyi National Ivan Ohiienko University, Ohiienko str., 61, 32302 Kamianets-Podilskyi, Ukraine, semerniaoksana@gmail.com

Abstract. In this article, we have described the optimal solution for the implementation of quality and effective Educational process. A new problem studied. We called this optimal solution Modelling Education System. The main idea of the article is to demonstrate to the reader different forms and types of e-learning as the implementation of Digital Modelling Education System. Further optimal modelling provides the correct prediction of the state of formation of the future specialist. Special attention paid to Special Multi-Level Competence Tasks and Practice Workshops. The corrosive properties described with particular attention Special Multi-Level Competence Tasks that focused on the implementation of educational, upbringing, developmental part of the purpose and digital competencies. A new way of purification recommended as distance learning on the MOODLE platform. Kamianets-Podilskyi National Ivan Ohiienko University, an example, of e-learning is distance learning on the MOODLE platform. This platform allows you to form a subject-object relationship in the cognitive activity of learners. The tutor acts as a mentor of subject-object relations and forms the professional knowledge and competencies of students based on Special Multi-Level Designed Competence Tasks in this discipline. A general conclusion made concerning Special Multi-Level Tasks of Competence content reveal to the tutors the creativity of the introduction of their own academic freedom.

**Keywords:** E-learning · Digital Modelling and Forecasting Education System · MOODLE · Special Multi-Level Competence Tasks · Practice Workshop

### 1 Introduction

Processes of Modelling and Forecasting occupies an important place in the World, including the Educational process. Digital Process Modelling is a hot topic today in connection with the pandemic around the World and the corresponding digitalization of civilization. Digital Processes Modelling and then their Forecasting allows to make many predictable actions and to make optimum decisions for safe vital activity of the person.

Let us talk about the Educational process.

Today we have a Distance Learning form mainly. Therefore, it is important effectively and efficiently seek new teaching methods in the digital distance-learning environment. In the days of traditional teaching, classical methods of pedagogy and psychology brought a guaranteed and expected learning outcome. However, times have changed. Now the trend is distance learning with new methods, forms, content of learning.

There is no quality Distance Learning for pupils and students in Ukraine due to different provision of material and technical base for both pupils / students and teachers / lecturers. The state is not able to cope with the material burden on the Educational process and therefore the participants in the Educational process cope with this problem alone. The problem is poor education. We can describe the Models of Virtual Learning in Ukraine. Nevertheless, the problem of quality provision of material and technical base remains open. What can done about it? The answer is obvious.

Emphasize the ideological and technological basis of the Educational process. These are fashionable current trendy ideas of education. Such as Digitalization of Education, STEM Education, Integrated Education, Dual Education, Inclusive Education, etc.

In addition, it is modern innovative methods, technologies, methods of training with use of Digital Distance Learning elements. Such as virtual didactics, virtual methodology, virtual teaching, modelling and forecasting in education, visual-acoustic learning, and methods of suggestion, hypnosis, and relaxation, another example as methods of self-suggestion, methods of psychological establishment, methods of involvement in remote work, etc.

The main emphasis in such an educational environment is on subject-object relations. The subject of learning is the pupil, the student, the learner. The object of study is a cognitive task, special purposeful learning guidelines, key words. The educational environment with minimal material and technical resources should overlap with the ideological and technological resources of the individual and his values.

In many countries around the World, a sudden pandemic has caught the Educational process. In addition, we need to act with the resources and we have now. Of course, the best equipment and Internet resources will significantly improve the quality of the Educational process by increasing the possibilities of implementing technologies more new remote. In addition, we have a strong professional potential of teachers, mentors, tutors, consultants, stakeholders, teachers, assistants, who are ready to lay the foundation of basic knowledge for those who study with minimal material and technical costs. This is the jewellery Skill of Educations.

Ukraine has a good Teacher's School. This is because teacher training based on classical methods and traditional teaching. The works of scientific teachers such as Ananiev B., Amonashvili Sh., Makarenko A., Ponomarenko O., Sukhomlynsky V., Ushinsky K., Shatalov A., etc. studied. The works of classical psychologists such as S. Rubinstein, O. Leontiev, D. Elkonin, R. Kostyukevich, etc. studied [1].

The teaching profession in Ukraine has a classic character of Psychological and Pedagogical orientation. Domestic teachers can cope with this teaching activity in any country of the World due to the classical basis of knowledge, competencies, and teaching schemes.

Let us talk about Modelling and Forecasting Education System in general. In general, the learning system should be model on the choice of fundamental learning models. These should be classic models such as student, teacher, object of study / cognitive task, standards, tasks / exercises, subject / discipline, normative / variable, lesson, call schedule, class schedule, journal, class / office / laboratory, etc.

The establishment of fundamental Models Education System commissioned by the Ministry of Education and Science to develop the average citizen of the state or a professional according to these standards. These standards prepared by the Ministry for the further benefit of the state in terms of the ability to work of a person who has studied in an educational institution.

After establishing the fundamental Models Education System, the modelling process takes place. That is, various, multifactorial relationships are built between models. Models built into a structural-logical scheme and cause-and-effect interaction.

Based on the process of Modelling Education System, the Education system predicted to provide the state with various opportunities to use those who studied in educational institutions or on their own.

Forecasting Education System is a separate important process. Forecasting Education System is a consequence of the correctness / effectiveness of the simulated learning system. Then there is a systematic adjustment and continuous verification of the training system as a whole. The purpose of such processes is to idealize the process of Modelling Education System.

### 2 Paper Preparation

Search engine Google gives the following most popular definition as for as. A learning system based on formalized teaching but with the help of electronic resources known as E-learning [2]. While teaching based in or out of the classrooms, the use of computers and the Internet forms the major component of E-learning. E-Learning, or electronic learning, is the delivery of learning and training through digital resources [2]. ... This makes it easy for users to learn anytime, anywhere, with few, if any, restrictions. E-Learning is training, learning, or education delivered online through a computer or any other digital device [2].

The system publishes popular examples of e-learning. E-learning examples [2]

- Patient Management. SB Studio. ...
- Using Computer Ports. SB Studio. ...
- Make the Sale. SB Studio. ...
- Information Security. SB Studio. ...
- Customer Service Scenario. SB Studio. ...
- Customer Service Video. SB Studio. ...
- Software Simulation Tasks. Plum E-learning for Netwatch....
- Chemical Safety and Hazard Communication. SB Studio for Barton Health.

Other popular questions and answers are: What is E-learning and its types? [2]

What are the types of E-learning? When Synchronous E-learning is, the learners and the instructor interact with each other in real time, from different locations. When Asynchronous e-Learning is learners complete self-paced online training. In this case, the learner and the instructor are not online at the same time.

What are the uses of e-learning? [2]

E-Learning allows for:

Provision of learning materials irrespective of time and location via a learning platform, such as ILIAS. Trying alternative assignments, for example, through blogs or wikis. Activating learning in groups as well as self-learning.

Which e learning software is the best? [2]

Top List: The Best eLearning Authoring Tools

- Adobe Captivate.
- iSpring Suite.
- Lectora.
- Koantic.
- Easygenerator.
- Elucidat.
- dominKnow.
- What is the Moodle platform? [2]

Moodle<sup>TM</sup> stands for Modular Object-Oriented Dynamic Learning Environment. Founded and developed by Martin Dougiamas in 2002, Moodle<sup>TM</sup> designed to provide educators, administrators, and learners with an open, robust, secure and free platform to create and deliver personalized learning environments.

Let's go. Consider Figure 1, which schematically explains the Modelling Educational System through digitization and the example of e-learning. We have standards of Digital Competencies of citizens of Ukraine, developed by the Ministry of Digital Transformation. The finish result is to obtain a quality model of a citizen of Ukraine who has specific competencies at different levels. The citizen actively reveals them in professional activity and the vital activity.



Fig. 1 Scheme of Modelling System in Educational through digitalization and the example of e-learning

All, E-learning is a plan for the implementation of the formation of Digital Competencies of citizens of Ukraine. As an example of e-learning, we will offer a MOODLE environment. At our Ohiienko University, this type of e-learning is implemented long-

term and constructively. In this MOODLE environment, there are multifunctional electronic possibilities both for the student and for the teacher. This free electronic resource is optimal for a quality Educational process at Ohiienko University [3]. When learning with distance technologies, participants in the Educational process actively use this resource in combination with others. There are GOOGLE Meet, Skype, ZOOM, Viber, GOOGLE Mail, e-mail etc.

In general, the subject tutor develops Special Professional Multi-Level Tasks / exercises, which MOODLE called tasks or tests, for students. It can also be an individual, personality-oriented task or a test for a student. The purpose of this development is to create a bank of tasks / tests for the formation of integrated, general, professional competencies of future professionals. Students perform a task or test and send it to the tutor in special electronic folders, which prescribed by the program MOODLE. The tutor checks the work, evaluates students. The tutor corrects students' activities by writing notes in the text fields or arguing points / grades for the task / test.



Fig. 2. Chema E-learning

Next. Consider Figure 2. It schematically presents the material for building a modeling of e-learning. The main participants in the Educational process are the subject and object of learning. The tutor acts in the main link of e-learning as a mentor of the predicted cognitive activity. The tutor targets the learning subject to the learning object using managerial influences. Such as a psychological attitude, the suggestion of relationships, involvement in activities. The subject of training himself psychologically establishes the motives for mastering professional information and transforming it into quality professional knowledge and competencies. This process takes place under the influence of the tutor. Next, the tutor suggests an attitude to the subject of study through innovative teaching methods. Such as suggestion, relaxation, hypnosis, etc. The subject of study is under the influence of the tutor and performs his tasks for the formation of professional knowledge and competencies. These tasks must be within the power of the learner to receive a positive incentive to realize their ability to learn.

The task developed by the tutor for each subject individually or personality-oriented so that its performance and answer are guaranteed to be correct. The strength of special professional competence tasks determined by the tutor with the help of operational control. These are techniques such as closed questions on yes / no, analysis of the general State of Health of the subject, communication on a remote topic, analysis of the State of Mind in a conversation with a tutor. The total duration of measuring the efficiency of control is 2-3 minutes. Next, the tutor has the general condition of the subject and offers him special tasks corresponding to this condition. The subject guaranteed to solve the task. This is the Success of Learning.

Let us consider a practical block from the discipline of Environmental Technologies for undergraduates in Ecology with the use of information and communication technologies.

These practical workshops are included in the e-learning system of Kamianets-Podilskyi National Ivan Ohiienko University called KPNU: MOODLE [3]. They are included in the virtual learning platform MOODLE (MOODLE is a learning platform designed to provide educators, administrators and learners with a single robust, secure and integrated system to create personalised learning environments) as the effective use of ICT in education.

The peculiarity each practical workshops is to create special competency tasks for the development and formation of their own thoughts, beliefs to study. These special competence tasks for each practical workshops are similar in text. However, the content of each task is personally oriented and unique, namely, focused on the master's own opinion. There are tasks for the manifestation of digital competence of undergraduates. It also is the introduction of information and communication technologies in education.

A purpose has also been develop for each Practice Workshop. The purpose consists of three parts as educational, upbringing, developmental goals and digital competence. The educational, upbringing, developmental parts of one purpose are integrated, general and professional competencies, which are describe in the Educational and Professional Program of this specialty. The Educational and Professional Program of the specialty is form in accordance with the Curriculum of the Specialty and the Standards of the Ministry of Education and Science of Ukraine in these branches of knowledge. This purpose motivates and orients the undergraduate to a clearly defined point of support during the study of the practical block of the discipline of Environmental Technologies. We have added digital competencies for this discipline to generate new modern Digital Knowledge and Experience. Digital competences are use from the Digital Competence Framework for Citizens [4]. In addition, this is the effective use of ICT in education for this specialty.

We move on. There is a part of Practical Workshop called Actualization of Basic Knowledge. It activates the brain activity of the undergraduate for further mastering of practical material. Actualization of Basic Knowledge motivates further study and application of theoretical material. The Actualization of Basic Knowledge reminds undergraduates of the acquired Digital Knowledge and Competencies. This part of the workshop is information technology communication in education.

Next. Workshop plan consists of a list of questions, the student has to sound in a report using the service online Google Presentation for students in the auditorium or in a virtual room.

The next stage. Different levels of competency exercises to form the planned learning outcomes. That is the realization of the purpose of the Workshop.

Then. At the end of the Practice Workshop, we asked questions for self-control of undergraduates, which encourage self-reflection and self- realization.

Example. The first seven Practical Workshops in the discipline of Environmental Technologies will reveal the content of the use of ICT in education on a specific example. Practice Workshop 1. Introduction. Green Economics as environmentally technology. Formation of ecological worldview of students

Purpose: Educational: to form: 1) the ability to develop strategies and programs for biodiversity conservation, restoration of individual species and to develop priority measures for conservation and restoration of biodiversity for individual ecosystems of valuable natural complexes, geographical areas; 2) economically justify the introduction of new technologies aimed at creating waste-free production, calculate the damage to the national economy if the permissible norms of waste storage in the environment are violated; 3) scientifically substantiate strategies for the development of society, use the regulatory framework of international and state structures; educational, formation environmental philosophy students: Upbringing: formation of students' knowledge about an effective environment for economic and social progress, based on minimizing the negative impact on the environment and efficient use of natural resources while maintaining a decent standard of living; Digital Competence: CO: Fundamentals of computer literacy. C0.K1. Use of computer and mobile devices. B2. According to my own needs and the solution of clearly defined and non-standard problems, I can independently: identify and use, including, configure the main common and new (nonstandard) computer and mobile devices of medium level of complexity.

Actualization of Basic Knowledge:

1. The relevance of the idea of Green Economy as Environmental Technologies

2. The degree of research of the idea of Green Economy

3. Basic conceptual ideas of Green Economy as Environmental Technologies Plan:

1. Green Economy as Environmental Technologies: essence, purposes and basic principles

2. Green Economy in the context of ensuring Ukraine's transition to sustainable development

3. Greening of production. Use Google Books

4. Formation of ecological worldview of students

Task: to prepare a report on a topic of practical workshop. In taking into account purpose, proclaim it for 15-20 minutes presentation using Google Presentation. To defend one's own point of view as a Loyalist or Antagonist.

Questions for self-control:

1. What is the relevance of the Green Economy as an Environmentally Technology?

2. Analysis of literature sources on the study of the problem of Green Economy in Ukraine.

3. Basic concepts of Green Economy as Environmental Technologies.

4. Principles of a Green Economy in the world based on the Google Public Data service.

5. Principles of sustainable development in the world based on the Google Public Data service.

6. What is the greening of production?

7. Formation of ecological worldview of students.

Practice Workshop 2. The Green Economy in Ukraine. Green Business

Purpose: Educational: 1) to analyse the man-made load on the natural environment in the regions, to assess the impact of economic sectors on the environment, to analyse the dynamics of emissions of the most common pollutants in the region and in terms of settlements; 2) apply methods for calculating the characteristics of agroecosystems and man-made landscapes in conditions of intensification of agricultural production; 3) be able to formulate the environmental policy of the enterprise and organize its accessibility and declaration to all stakeholders for timely adjustment and consistent improvement; Upbringing: to cultivate national eco-patriotism, on the example of the introduction of Green Tourism in Ukraine; Developmental: to form knowledge about: preservation and reproduction of green plantations, ensuring the integrity of ecosystems, improving the quality of natural resources, etc.; increasing resource efficiency (increasing the productivity of natural resources involved in Economic Turnover and reducing waste through the introduction of a closed production cycle and the most complete utilization of waste), with a reorientation to the predominant use of renewable resources; economic development on the basis of structural changes leading to an increase in the weight of green sectors with a corresponding reduction in brown; ensuring social progress in the green segment of the economy; creation of green jobs, growth of incomes of the population received at the expense of employment in the green sector of economy, increase of quality of the goods and services at the expense of receipt on the market of Green Products; Digital Competence: C0.K2. Use of system software. B1. Independently and solving direct problems, I can: understand and use the basic functions of the system software of common computer and mobile devices to solve routine tasks of medium complexity; understand the need to update system software.

Actualization of Basic Knowledge:

1 -4. Questions from the plan of Practice Workshop 1.

Plan:

1. Green Economy as Environmental Technologies: opportunities of Ukraine

2. Green Economy as Environmental Technologies: contradictions and prospects for development. Analysis based on the Google Public Data

3. Green Tourism

4. Green Business

Tasks: 1) to prepare a report on the topic of Practical Workshop for 15-20 minutes. In addition, proclaim it. In counting the purpose and use presentation online Google Presentation. To stand up for one's point of view as a Loyalist or Antagonist;

2) Answer to questions for self-control.

Questions for self-control:

1 -5. Questions for self-control from Practical Workshop 1.

6. Factors of introduction of Green Economy in Ukraine.

7. Green Tourism in Ukraine.

8. Green Business. Use Google Books.

9. What is the greening of production? Use Google Books.

10. Formation of ecological worldview of students. Create a Google Form three-frame survey with response statistics.

Practice Workshop 3. Features of Green Economy and Nature Conservation Technologies. Green Investments

Purpose: Educational: 1) to use norms, methods of control and efficiency of nature protection technologies at protection of natural components of environment and to estimate biological (ecological) safety of modern technologies; 2) be able to develop criteria, methods and procedures for environmental labelling, improve the environmental management system in order to preserve the environment, create eco-marketing projects; Developmental: to form knowledge about: protection, preservation, reproduction of natural resources and prevention of irreversible loss of biodiversity by minimizing the negative anthropogenic impact on the environment; Upbringing: same as in Practice Workshop 2; Digital Competence: CO.K3. Use of applications and application software. A1. At a basic level and with the help of I can: understand and use the minimum set of functions of applications and application software of the simplest and / or most common computer and mobile devices to solve basic problems.

Actualization of Basic Knowledge:

1-4. Questions from the plan of Practical Workshop 2.

Plan:

1. Green Economy as a mechanism for overcoming unemployment and environmental technologies. Google Public Data Analysis.

2. Measuring Green Growth in Ukraine and conservation technologies.

3. Green Office.

4. Green Investments. Analysis based on the Google Public Data.

Tasks: 1) to prepare a report (15-20 minutes) based on the Google Public Data on the topic of Practical Workshop. Consider the purpose; proclaim it, using the online Google Presentation. To defend one's point of view as a Loyalist or Antagonist;

2) Answer to questions for self-control.

Questions for self-control:

1. What is the relevance of the Green Economy? Google Public Data Analysis.

2. Basic concepts of Green Economy. Analysis based on the Google Public Data.

3. Principles of Green Economy and principles of sustainable development.

4. Factors of introduction of Green Economy in Ukraine.

5. How to overcome unemployment using the Green Economy and Environmental Technologies in Ukraine? Use Google Alerts.

6. Factors of Green Economy development and nature conservation technologies in Ukraine.

7. Green Office as concept. Use Google Books.

8. Green Business. Demonstrate with You Tube.

9. Green investments. Demonstrate with You Tube.

Practice Workshop 4. Conceptual provisions of the Green Economy as Environmental Technologies

Purpose: Educational: 1) be able to form the environmental policy of the enterprise and organize its accessibility and declaration to all stakeholders for timely adjustment and consistent improvement; 2) as in Practice Workshop 3; 3) to use norms, methods of control and efficiency of nature protection technologies at protection of natural components of environment and to estimate biological (ecological) safety of modern technologies; Upbringing: to cultivate national eco-patriotism; Developmental: to form knowledge about: ensuring social progress in the green segment of the economy, namely the creation of green jobs, growth of incomes obtained through employment in the green sector of the economy, improving the quality of goods and services by entering the green market products; Digital Competence: as in Practice Workshop 2.

Actualization of Basic Knowledge:

1-5. Questions of the plan for Practical Workshop 3. Plan:

1. Implementation of the concept of Green Economy: experience and problems of Ukraine

2. Block diagram of the concept of Green Economy. Analysis based on the Google Public Data.

Tasks: 1) to prepare the analysis of the survey on the concept of Green Economy based on the Google Form platform (four frames). Proclaim report for 5-10 minutes, using an online Google Presentation.

2) Answer to questions for self-control.

Questions for self-control:

1. What is the relevance of the Green Economy?

2. Basic concepts of Green Economy. Use Google Books.

3. Principles of Green Economy and principles of sustainable development. Use Google Books.

4. Factors of introduction of Green Economy in Ukraine. Demonstrate with You Tube. Practice Workshop 5. Statistical assessment of the development of the Green Economy in Ukraine

Purpose: Educational: 1) to form the ability to ensure environmental safety and conditions of Sustainable Development, to solve problems aimed at reducing the anthropogenic impact on ecosystems, to assess, predict the impact on the elements of the biosphere of certain man-made factors; 2) learn to apply methods for calculating the characteristics of agroecosystems and man-made landscapes in terms of intensification of agricultural production; 3) use the norms, methods of control and efficiency of environmental technologies in the protection of natural components of the environment and assess the biological (ecological) safety of modern technologies; Upbringing: to cultivate national eco-patriotism; Developmental: the same as in Practice Workshop 2; Digital Competence: C0.K4. Use of the Internet and online applications. Be able to use the Internet and online applications. Understand the technology of administration and creation of online services and online applications. B2. According to my own needs and to solve clearly defined problems, I can independently: use the Internet and online applications to solve problems of varying complexity; master new online services and online applications of different levels of complexity.

Actualization of Basic Knowledge:

1 - 2. Questions of the plan of Practical Workshop 4.

3. How to use the Internet and online applications to solve problems of different levels of complexity?

Plan:

1. Evaluation of the development of the Green Economy and Environmental Technologies. Analysis based on the online Google Sheets.

2. Methods of comparing the development of the Green Economy in Ukraine. Analysis based on the online Google Sheets.

Tasks: 1) to prepare a report on the topic of Practical Workshop using online tools. Proclaim the report within 15-20 minutes. Use online Google Presentation. To defend one's point of view as a Loyalist or Antagonist;

2) Answer to questions for self-control.

Questions for self-control:

1. What is the relevance of the Green Economy? Demonstrate with You Tube.

2. Basic concepts of Green Economy. Use Google Books.

3. Principles of Green Economy and principles of Sustainable Development. Use Google Alerts.

4. Factors of introduction of Green Economy in Ukraine. Use Google Alerts.

Practice Workshop 6. Green Economy as Environmental Technologies: a strategic priority of reforms at the regional level

Purpose: Educational: to form: 1) ability to apply the principles and principles of state policy in the field of environmental protection and environmental management; 2) the ability to form a system of environmental management and management procedures for enterprises, components of environmental management, functions, tasks of environmental management bodies; 3) scientifically substantiate strategies for the development of society, use the regulatory framework of international and state structures; 4) to analyse the techno genic load on the natural environment in the regions, to assess the impact of economic sectors on the environment, to analyse the dynamics of emissions of the most common pollutants in the region and in terms of settlements; Upbringing: to cultivate national eco patriotism; Developmental: the same as in Practice Workshop 2; Digital Competence: same as in Practice Workshop 5.

Actualization of Basic Knowledge:

1-2. Questions of the plan of Practice Workshop 5. Plan:

1. Repository of the National Aviation University. Green Economy. Use You Tube.

2. Reforms of the Green Economy at the regional level.

Tasks: 1) to prepare a report on the subject of Practical Workshop. The duration of the report is 15-20 minutes. Use Google Presentation. To stand up for one's own point of view as a Loyalist or Antagonist;

2) Answer to questions for self-control.

Questions for self-control:

1. What is the relevance of the Green Economy? Use Google Presentation.

2. Basic concepts of Green Economy. Analysis based on the Google Public Data.

3. Principles of Green Economy and principles of Sustainable Development. Use You Tube.

4. Factors of introduction of Green Economy in Ukraine.

5. Reforms of the Green Economy at the regional level. Use Google Presentation.

6. Garbage processing plant. Use You Tube.

Practice Workshop 7. Strategic priorities of Safe Development of Ukraine based on Green Economy

Purpose: Educational: 1) to form the ability to use indicators of sustainable development to justify decisions related to the development of socio-economic systems; 2) the ability to develop priority measures for the conservation and restoration of biodiversity for individual ecosystems of valuable natural complexes, geographical areas; 3) the ability to ensure environmental safety and conditions of sustainable development, to solve problems aimed at reducing the anthropogenic impact on ecosystems, to assess, predict the impact on the elements of the biosphere of certain man-made factors; 4) the ability to apply the principles and principles of state policy in the field of environmental protection and environmental management; Upbringing: to cultivate national eco patriotism; Developmental: as in Practice Workshop 2; Digital Competence: as in Practice Workshop 5.

Actualization of Basic Knowledge:

1. Repository of the National Aviation University. Green Economy

2. Green Economic Reforms at the Regional Level: Zero Waste Concept

3. Garbage processing plant. Google Public Data Analysis

Plan:

1. Safe Development of the Green Economy in Ukraine.

2. Block diagram of strategic decisions of a secure Green Economy in Ukraine.

Tasks: 1) to conduct a survey based on the online Google Form on the security of the Green Economy in Ukraine. The results of the survey will be announce in the report for

5-7 minutes. The results should be present in the form of charts from Google Disk;

2) Answer to questions for self-control.

Questions for self-control:

1. What is the relevance of the Green Economy? Use You Tube.

2. Basic concepts of Green Economy.

3. Principles of Green Economy and principles of Sustainable Development.

4. Factors of introduction of Green Economy in Ukraine. The results should be presenting in the form of charts from Google Disk.

5. How to overcome unemployment using the Green Economy and Environmental Technologies in Ukraine? Conduct surveys based on the online Google Form.

6. Factors of Green Economy development and Nature Conservation Technologies in Ukraine. Conduct a survey based on the online Google Form.

7. Implementation of the concept of Green Economy: experience and problems of Ukraine.

8. Methods for evaluating and comparing the efficiency of the Green Economy in Ukraine.

9. Green Economic Reforms at the Regional Level: Zero Waste Concept.

10. Environmental security of the Green Economy in Ukraine. Use You Tube.

Thus, constructed and Practical Workshops using special competence tasks implement the effectiveness and efficiency of ICT in education. These tasks are using modern free Digital Technologies such as the online Google Public Data, online Google Sheets, online Google Presentation, online Google Alerts, video resource You Tube, online platform Google Form, online intelligence Google Books, etc.

#### 3 Conclusion

In modern realities of life, the problem of Digital Modelling of various systems and processes is actual. In particular, the process of educational activity best regulated when there is a Digital Modelling Education System. Digital Modelling Education System is the optimal solution for predicting the guaranteed result of the formation of a quality professional. Based on e-learning, we have demonstrated the cause-and-effect operation of ideal models system in education to predict the guaranteed result. The best e-learning at Kamianets-Podilskyi National Ivan Ohiienko University is learning on the MOODLE distance platform [3]. Participants in the educational process are optimally

involved in virtual learning and directed by tutors to the epicentre of professional competencies.

Today, we have the opportunity to learn Digital Technologies at an accelerated pace and apply them in life. In the Educational process, it is e-learning. This type of training allows you to optimally predict results and regulate quality. The effectiveness of elearning in its present. The effectiveness of e-learning in its constant dynamics of using digital learning technologies. In addition, if the state has a weak material base for Digital Technology, then Digital Technologies implement and compensate for this imbalance in the Education system now.

Special Multi-Level Tasks of Competence content reveal to the tutor the creativity of the introduction of their own academic freedom. The tutor as a mentor uses managerial influences for the optimal implementation of the formation of the future specialist. The tutor uses both the task and the MOODLE remote platform in balance. This is the basis of the process of Modelling and Forecasting Education System through e-learning and appropriate Learning Avenue developed by the tutor.

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