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Application of Virtual Reality Techniques in Professional Training of Master Degree Students Within the Study of The Discipline “Business English” (Based on The Simulation Outfit Business Game)

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Abstract. The article presents the theoretical and experimental results of research into the field of education. The problem statement was caused with the fact that virtual reality (VR) offers learners an immersive and interactive learning experience, allowing them to comprehend challenging concepts and ideas more efficiently and effectively. VR technology has enabled educators to develop a wide range of learning experiences, from virtual field trips to complex simulations, that may be utilized to engage students and help them learn. Learning theories and approaches are essential for understanding how students learn and how to design effective learning experiences. In addition, the actuality of the ongoing research is proven with the evidence that today, modern requirements for specialists' increase year by year and include not only a high level of knowledge and skills in the field, but also mastery of a foreign language at an appropriate level. It is connected with the fact that a modern specialist receives new professional information through foreign sources. Studying today of foreign languages contributes to the implementation of such areas of professional activity as familiarization with new technologies, scientific hypotheses, outstanding innovations in the field techniques; establishing contacts with foreign partners, companies, enterprises, educational institutions; increasing the level of professional competence of specialists. Possession of a foreign language is no longer a sign of prestige, but a necessity a modern specialist. The main purpose of the pedagogical research is to demonstrate alternative method of future specialists professional training by means of applying virtual reality techniques in teaching Master degree students within the study of the discipline “Business English” (based on the Simulation Outfit Business Game). Consequently, the following tasks were outlined, such as: firstly, to give a theoretical review of the essence, advantages and disadvantages of e-learning; secondly, give exemplified analysis of the game modules virtual reality training (reflection on Supply Chain Relationships and Responsibilities; reflection on Forecasting and Contracts; reflection on Human Resources and Capacity Planning) and, thirdly, correlate each defined training module with business theories giving brief presentation of them in particular. The outcomes of the paper have revealed that VR learning comprises a plenty of benefits for professional training: one of the primary advantages of implementing VR in education is that it provides a more immersive and engaging learning experience; VR can transport learners to difficult-to-access places, such as business manufacture; students are able to better understand the subject and engage with the learning material when they are given a unique perspective.

Key words: virtual reality, VR method, Master Degree students, Business English, Simulation Outfit Business Game, professional training, qualifications, responsibilities, educational theories, virtual reality in education.

Використання технологій віртуальної реальності у професійній підготовці магістрантів під час вивчення навчальної дисципліни «Ділова іноземна мова» (на прикладі ділової гри-тренажеру)

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Анотація. У статті представлено теоретичні та експериментальні результати досліджень у галузі освіти. Постановка проблеми була зумовлена тим фактом, що віртуальна реальність (VR) представляє захоплюючий та інтерактивний досвід навчання, що дозволяє студентам більш ефективно та результативно осягати складні концепції та ідеї. Технологія VR дозволила викладачам розробляти широкий спектр навчальних програм, від віртуальних екскурсій до складних симуляцій, які можна використовувати для залучення студентів і допомоги

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їм у навчанні. Теорії та підходи до навчання мають важливе значення для розуміння того, як студенти навчаються та як розробити ефективний досвід навчання. Крім того, актуальність проведеного дослідження підтверджується тим, що сьогодні сучасні вимоги до підготовки спеціалістів зростають з кожним роком і включають не лише високий рівень знань і навичок у відповідній галузі, а й володіння іноземною мовою на відповідному рівні. Це пов'язано з тим, що сучасний фахівець отримує нову професійну інформацію з іноземних джерел. Вивчення сьогодні іноземних мов сприяє реалізації таких сфер професійної діяльності, як ознайомлення з новими технологіями, науковими гіпотезами, видатними інноваціями в галузі техніки; налагодження контактів з іноземними партнерами, компаніями, підприємствами, навчальними закладами; підвищення рівня професійної компетентності спеціалістів. Володіння іноземною мовою – це вже не ознака престижу, а необхідність сучасного фахівця. Основна мета педагогічного дослідження – продемонструвати альтернативну методику професійної підготовки майбутніх спеціалістів шляхом застосування технологій віртуальної реальності у навчанні студентів магістратури в рамках вивчення дисципліни «Ділова англійська мова» (на основі ділової гри Simulation Outfit Business Game). Як результат, були окреслені такі завдання, зокрема: по-перше, дати теоретичний огляд сутності, переваг і недоліків VR навчання; по-друге, провести прикладний аналіз навчання VR в рамках ігрових модулів (обов'язки та відповідальність у ланцюгу поставок; прогнозування та контракти; людські ресурси та планування потенціалу) і, по-третє, співвіднести кожен визначений навчальний модуль із бізнес-теоріями, надавши коротку презентацію кожної з них. Результати наукової роботи показали, що VR навчання має багато переваг для професійної підготовки: одна з головних переваг полягає в тому, що вона забезпечує більш захоплюючий і привабливий досвід навчання; VR може транспортувати здобувачів вищої освіти у важкодоступні місця, наприклад на виробництво одягу; студенти можуть краще зрозуміти предмет і залучитися до навчального матеріалу, коли їм надається унікальна перспектива.

Ключові слова: віртуальна реальність, метод VR студенти магістратури, ділова англійська мова, бізнес-гра Simulation Outfit, професійна підготовка, кваліфікація, обов'язки, освітні теорії, віртуальна реальність в освіті.

I Introduction

The desire of societies all over the world to keep up with technological progress and globalization and the implemented actions generate new challenges. As defined by UNESCO, these challenges are represented by increased complexity and uncertainty, greater individualization and social diversity, expansion of economic and cultural uniformity, deterioration of ecosystem services on which they depend, increased vulnerability and susceptibility to natural and man-made disasters, access to a huge amount of information, which, in turn, is rapidly growing in volume. At the same time, new challenges give rise to a new round of development of society, education, people, new technological solutions, new forms of transfer of experience to the next generation, new opportunities, like e-learning (Figure 1).

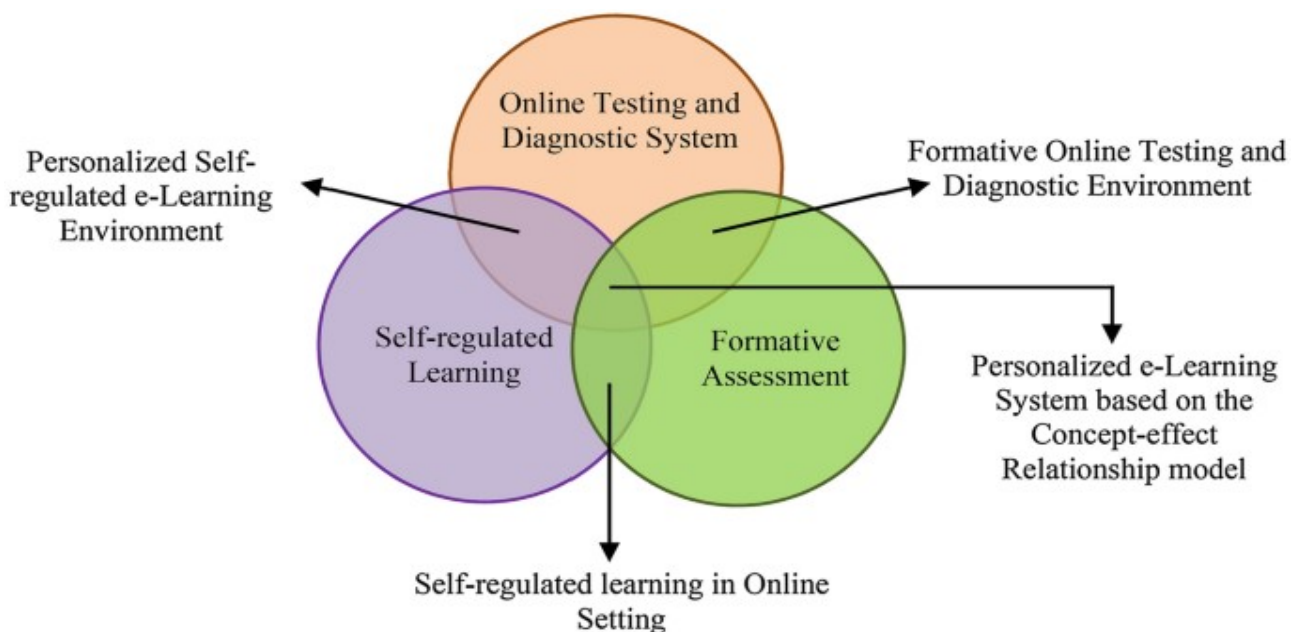


Fig. 1. Personalized E-learning Systems

So, considering the actuality of the chosen issue and clear problem statement in the modern conditions of the Higher education development we might define the aim and core tasks of the current research [2; 4; 8].

The *main purpose of the pedagogical research* is to demonstrate alternative method of future specialists professional training by means of applying virtual reality techniques in teaching Master degree students within the study of the discipline “Business English” (based on the Simulation Outfit Business Game). Consequently, *the following tasks were outlined*, such as: *firstly*, to give a theoretical review of the essence, advantages and disadvantages of e-learning; *secondly*, give exemplified analysis of the game modules virtual reality training (reflection on Supply Chain Relationships and Responsibilities; reflection on Forecasting and Contracts; reflection on Human Resources and Capacity Planning) and, *thirdly*, correlate each defined training module with business theories giving brief presentation of them in particular.

II Material and Methods of Research

In the frame of current research along with classical quantitative and qualitative research methods VR method was applied to demonstrate the sufficient ways of shaping professional skills in Master Degree students over a specified period of time (Figure 2).

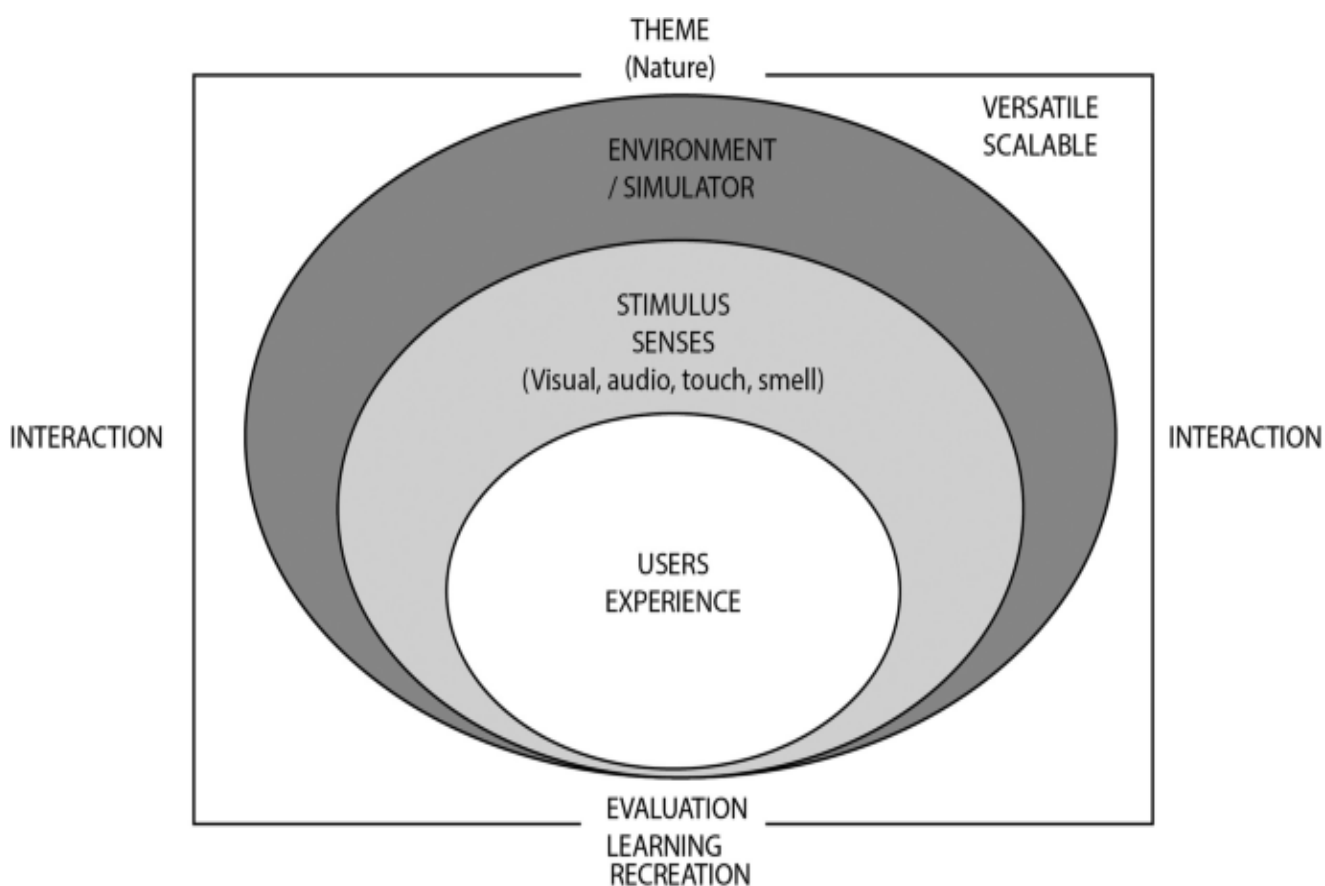


Fig. 2. Virtual Reality as an Affordable Learning Method

The article reveals the results of the study of significant processes that are implemented at four levels of work with information and information resources. T. Miyer has defined the following levels:

The level of information creation;

The level of information preparation and formation of information resources;

The level of the subject's work with information and its further use;

The level of purposeful training of a person to work with information [9; 13].

The state of formation of human readiness to work with information during two periods of the 21st century was also investigated:

Period I (2000-2018) – the beginning of the 21st century – the beginning of the spread of the COVID-19 pandemic – an analysis of scientific research of this period, the content of which relates to information-value orientation, analytical ability, information mobility, information-search readiness, information literacy.

Period II (2019-2022) – the period of spread of COVID-19 (2019-2021) – introduction of martial law on the territory of Ukraine (2022) – research of the process of formation of children’s ability to work with printed information in family conditions [15; 19].

The information era is characterized by the diversity of information, sources of information, information technologies in all spheres of life and the globalization of the information space, which ensures the rapid exchange of information flows and the rapid introduction of new information into public circulation.

Working with information has become a complex process, which, according to our reasoning, is carried out on four levels.

We have defined the following levels:

The level of information creation;

The level of information preparation and formation of information resources;

The level of the subject's work with information and its further use;

The level of purposeful training of a person to work with information.

To reveal the components of the active information space, we will use the scientific work of I. Aristova. The scientist defines the following components of the information space [1; 10; 12]:

Information resources (databases and data banks, all types of archives, libraries, museum repositories);
Information and telecommunication infrastructure (territorially distributed state and corporate computer networks, telecommunication networks and systems for special purpose and general use, data transmission networks and channels, means of managing information flows).

Information, computer and telecommunication technologies (basic, applied and supporting systems, means of their implementation);

Research and production potential in the fields of communication, telecommunications, informatics, computer technology (used to disseminate information and provide access to it).

Organizational structures and personnel that ensure the functioning and development of the national information infrastructure.

The market of information technologies, means of communication, informatization and telecommunications, information products and services.

The system of interaction of the information space of Ukraine with the world's open networks.

Information protection (security) system.

Mass information system.

System of information legislation [4; 7].

We would like to add that in the Law of Ukraine “On Information” [9], the term “information” denotes documented or publicly announced information about events and phenomena occurring in society, the state, and the natural environment.

III Results

Education in educational institutions in the conditions of the information era is aimed at the formation of the following necessary elements:

– Information-value orientation (the basis of the orientation is the attitude towards information as a value without which it is impossible to achieve personal, professional, and social development as well as tolerance for uncertainty when working with information);

– Analytical ability (the basis it is the ability to analyze the reliability, completeness, and objectivity of information in conditions of uncertainty); Information mobility (the basis of mobility is the ability to transfer knowledge from one information environment to another, to quickly adapt to new and modernized information search and processing technologies);

– Information-search readiness (the basis of readiness is the attitude to the situation of uncertainty as a situation that is necessary and useful for the performance of information search activity, as well as the attitude

to the process of information search as an opportunity to achieve a certain level of educational, personal, and professional development);

– Information literacy (the basis of literacy is the ability to determine the purpose of information search, taking into account the problem to be solved (the task to be performed), to determine sources of information (paper, electronic, network resources, etc.), to determine the most effective ways to search for information; to highlight the necessary information to solve assigned tasks, to establish the reliability and accuracy of information, to evaluate its effectiveness in solving a problem (fulfilling a task), to analyze information and organize the results of the analysis in accordance with the purpose of the search, to integrate new information into the system of own knowledge, to effectively use the processed information, to predict consequences of informational influences on the social environment and be ready to bear responsibility for it) [8; 11; 24].

First and foremost, contemporary university students' professional training must keep pace with the most recent advancements in science and technology. As a consequence, the "Simulation Game Based Portfolio" assignment that was provided is very contemporary and increases knowledge and abilities. The issue is that contemporary university students need to complete their coursework with both theoretical and practical instruction. Hence, this assignment is highly required, adequate, and helpful because its goal is to develop business management abilities through the application of game simulation techniques. In my opinion, the fact that this approach to learning practical skills is connected to advancements in virtual reality makes it excessively modern. The use of virtual reality (VR) technology is revolutionizing how the corporate sector approaches training. VR training engages employees and provides organizations with a potent new training modality because of its immersive, interactive, and personalized nature. Compared to traditional training techniques, VR training offers various benefits. The biggest major benefit of virtual reality is a controlled and safe learning environment (Figure 3) [9; 14].

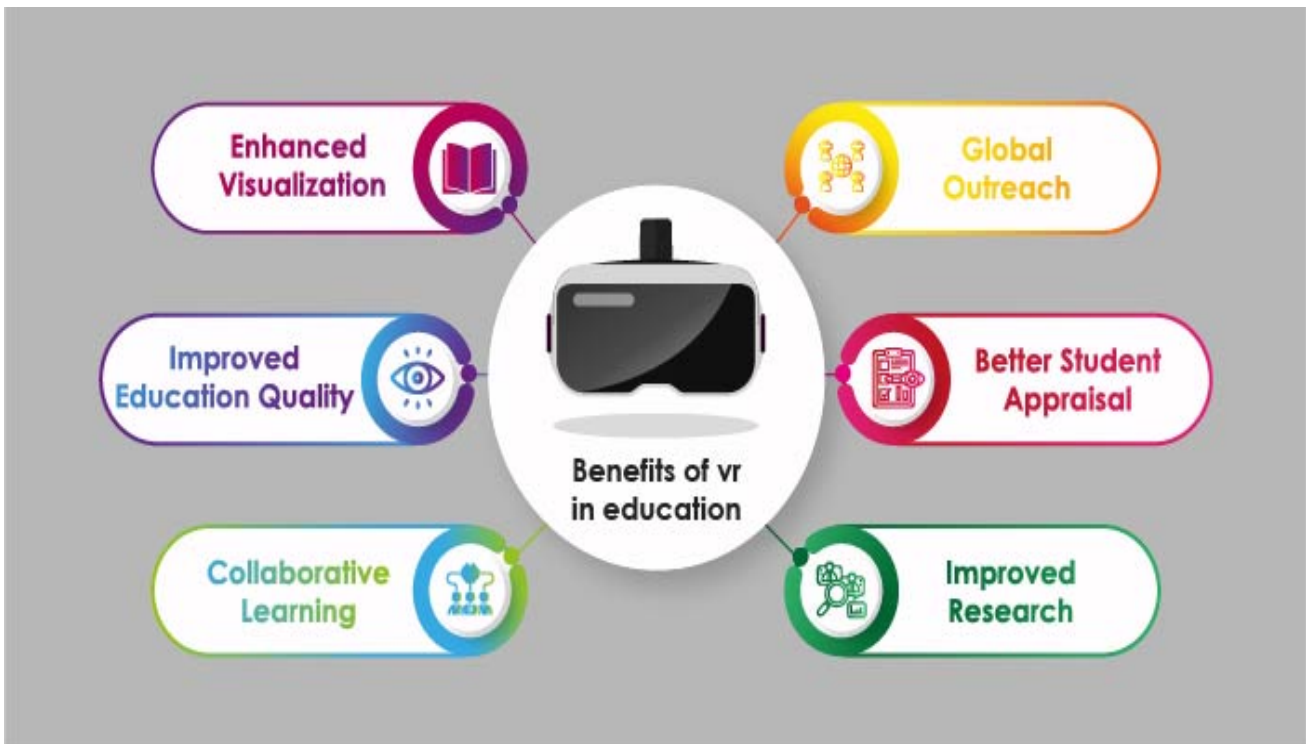


Fig. 3. Benefits of VR in Higher Education

Furthermore, it is possible to effectively fulfil the goals and significance of supply chain management and operations management by gaining knowledge and abilities through gaming simulations. Employees may practice skill development and see the cause and effect links of their activities, especially in Operations Management and Supply Chain Management learning simulations, without facing any real-world repercussions. This kind of scenario-based learning, in my opinion, made it easier for me to interpret my training experiences

and increased my comfort level in handling pressure-filled scenarios, both of which improve my performance in real life.

We are going to provide a perspective on the "Supply Chain Relationships and Responsibilities" inside the Clothes Manufacturing Company depicted in the game video, which opens the main body of the required job named "Simulation Game Based Portfolio". We had the authority to assume the position of Chief Executive Officer (CEO) in a company setting during the game. We therefore had a lot of managerial responsibilities to fulfil, like assigning the production manager tasks related to the kind, volume, and manufacturing priorities of the goods; planning the planned shipment of finished goods to customers; and updating manufacturing equipment to the highest standards possible. We have completed 5 contracts in this module. Since the clothing company theory pertains to all relationships between two parties (CEO and Order), wherein the former is the principal and the latter is the agent representing the principal in dealings with third parties (Production Manager), the background of Module #1 was devoted to the Outsourcing Theory. The Machinery Upgrading Theory can be used to explain some of the video content. In addition, upgrading involved swapping out an outdated clothing production machine for a more modern model. In order to update the manufacturing of items or enhance their qualities, the corporation would often replace outdated equipment with newer or better models (Figure 4) [8; 11; 22].



Fig. 4. Outfit Business Simulation Game

The next theory related to the Game Portfolio was Frederick Taylor's scientific management theory, also known as the classical management theory, which places an emphasis on worker production and efficiency. In addition, Taylor's theory may be used to explain my actions as a manager of a firm, since we used to strictly regulate the production of items to meet deadlines and fulfil all orders received on time. In my opinion, companies who provide the best products or services draw in the greatest number of consumers. For this reason, we felt that the game simulation process required the use of 4Vs theory. We concur with the 4Vs theory's central thesis, which states that the realization of four operational processes – volume, variety, variation, and visibility – directly affects a company's ability to succeed. When competent managers are in charge of overseeing the main processes that convert essential resources into deliverable goods or services, clothing companies are able to thrive. The creation of value in every operations management process is the foundation for the process of developing new goods and services. In my instance, we fulfilled the product volume while fulfilling my duties as firm management by producing diverse quantities and kinds of specific ordered items, such as 1000 ties, 600 white T-shirts, as well as variously styled socks and shorts.

We are going to the next module in our report, "Reflection on Supply Chain Relationships and Responsibilities," where we will describe the interconnected phases of the supply chain and emphasize the roles

and responsibilities of each employee. First, the receiving step required me to select the supplies and place a lucrative order. We also had to agree with the delivery firm on the number of orders per week, the frequency of those orders, and the time constraints. As the manager of the firm, we were entitled to all of these tasks. The second step had to do with the manufacture of the items, and as the manager of the firm, it was my responsibility to oversee the whole production process to meet deadlines and save a few days so that the created goods could be sent and delivered to the client without any problems or delays [3; 9; 10].

As a manager of a firm, the largest challenge we had was related to the shortage of requested material. Due to restricted volume, we had to wait for an extended length of time and pay a lot more than the first scheduled delivery demanded. We have to order material my-self and this is the main difference for the first module. Also, we had to update the machinery to make the production sector work faster and that the goods were ready for shipping on time. We have completed 5 of 5 contracts. We must apply the quality management theory in order to analyze my managing position. This quality theory places a strong emphasis on product quality and explains how it is a management strategy for long-term success through client satisfaction. This idea holds that every employee in an organization contributes to the enhancement of services, procedures, and goods, which enhances the workplace culture. In my instance. We conducted quality inspections prior to two crucial material arrival and shipment phases in order to properly oversee the quality of the generated items. Specifically, the special worker was instructed to complete the task within the parameters of his job responsibilities. The second module technique likewise made use of the notion of the five criteria. 5Trade Offs, or management for quality theory, was applied in the business process to make sure we finished all of the assignments and carried out all production procedures to guarantee a certain standard of perfection.

Thus, 5Trade Offs theory was relevant to the actual process of producing products because it guaranteed that a business was reaching and sustaining a certain standard of quality that consumers could depend on each and every time they made a purchase [11; 13; 18].

The first trade-off is that satisfying and surpassing consumers' expectations will make them happier, which will increase sales and improve customer retention. A corporation can better offer goods and services that satisfy the demands of its consumers if it has a deeper understanding of those needs. Second trade-off: capable leadership. As a leader, we inspire and encourage team members to support the organization's objectives in order to improve quality control outcomes. Effective leadership, in my opinion, may also raise the standard of the company's output and make the workplace more productive. Other trade-offs occurred in the company's clothing production process, such as employee involvement, process approach, and continuous improvement. As we go to the third step, we will reflect on contracts and forecasting. As a manager at the start of the give, we had an excellent range of different contracts from which to choose three. In order to ensure that we would receive them, we also had to sign contracts with the lowest reputation – two or one stars. However, we took a chance by fulfilling every order under the contracts in order to meet the dates, even though doing so would have meant failing to fulfil the requirements of the contract and stopping the production process with enough losses. The issue is that the contract's absence prevented me from realizing a respectable output [2; 8; 11].

At this point, the most crucial element was that we had to project all potential losses and failures. We used forecasting to order the supplies ahead of time so that we could fulfil all of the requirements outlined in the two-star contract. The technique of estimating and projecting future consumer demand for a good or service is known as demand forecasting, and it involves applying predictive analysis to historical data. Demand forecasting estimates the total sales and revenue for a future period of time, enabling the organization to make more educated supply decisions. By projecting future sales, demand forecasting theory enables firms to optimize inventories (Figure 5).

Demand managers may make well-informed judgements regarding inventory planning, warehousing requirements, executing flash sales, and satisfying customer expectations by examining past sales data. As a manager, I've come to the view that there can be no business without demand, and that companies cannot make wise judgements regarding marketing budget, production, hiring, and other matters until they have a complete grasp of demand. Although there can never be a 100% accuracy rate in demand forecasting, there are actions you can do to shorten lead times for manufacturing, boost operational efficiency, reduce costs, introduce new goods, and enhance customer satisfaction. As we approach the last module of the Game Simulation profile, which is concerned with the reflection on HR and capacity planning, we will provide details on the staff members

that are accessible and how they relate to each other. We played the same roles as in the previous module in this section, but we also had to hire employees and oversee their daily work.



Fig. 5. Master Degree Students Outcomes from Outfit Business Simulation Game

To that end, we had to hire two employees for receiving, one person for billing and contracts, two employees for the shipping process, and three employees for the production area.

Additionally, we considered many company operating characteristics when selecting the staff. In addition, we purchased all the equipment needed to produce clothes, updated the machinery, and educated every employee. More specifically, we upgraded them to the third level of modernity by buying seven pieces of equipment. In addition, we oversaw the recruiting of new employees and the resignation of any staff members who could not handle their job responsibilities. By utilizing my human resources and capacity planning resources, we implemented performance management theory in a proactive manner [3; 7; 13].

Overall, the notion of performance management has been a useful tool for me in tracking and assessing the work of my staff. Creating an atmosphere where individuals may perform to the best of their ability and in line with the organization's overall goals was the aim of my performance management.

The use of performance management is common in both the public and commercial sectors. We could to reach the goal, because of the short off time and it was difficult to manage all of the sectors at the same time, but We did understand the main idea of the game and the main goals that the game shot me the main task how and the proses works.

All of the implemented theories – Taylorism, Outsourcing, Machinery Upgrading, and 4Vs had a very favorable effect on how the business operated normally. It is also important to note that 4Vs were crucial in the manufacturing process because: the quantity of goods produced is an important indicator of consumer confidence in a good or service; the variety of 4Vs refers to the range of goods and services that can be produced and sold to clients; this is about offering a diverse range of goods and services to clients, which also helps businesses increase sales and profit potential by lowering their reliance on one or two products, which can cause them to go out of business if the market for those products or services declines.

Furthermore, supply chain roles and interactions were closely related to quality management theory as implementing certain procedures may guarantee a business's efficient and reliable production of high-quality goods [2; 11; 18].

Additionally, 5 Trade Offs involvement evaluated the goods and services produced, analyzed systems and procedures to enhance production techniques, and determined the quality standards to match the company's goals. Therefore, in my capacity as a manager, we implemented five trade-offs during the clothes manufacturing process. The seven quality management principles – customer focus, leadership, staff

engagement, process approach, and continuous improvement – will significantly boost the results and profitability of the business.

Furthermore, a component of effective business management was linked to production forecasts. The hypothesis behind the research's forecasting theory – specifically, for the apparel industry was that previous and present information might be utilized to foretell how things will be manufactured in the future. As a manager of the firm, we believe that the largest advantage of forecasting is the decrease in backorders. Although unanticipated spikes in demand will always occur, accurate demand forecasting helps lessen backorders. When you don't have enough merchandise to fulfil demand, you may have backorders, which might irritate clients and make them choose a rival.

You risk losing them permanently if they end up favoring the rival. Demand planning lowers the likelihood that you will run out of clients. In conclusion, performance management theory was used in my managerial job with the aim of assisting staff members in achieving optimal performance in accordance with the objectives of the company. It considers people within the larger framework of the workplace and values their participation in goal-setting [3; 8; 11].

Crucially, performance management theory promoted a clear knowledge of expectations by emphasizing responsibility and openness. Performance management gave employees regular feedback rather than only yearly reviews.

Overall, proponents of performance management argue that in addition to helping apparel companies achieve their objectives, it also enhanced worker retention, which has a positive impact on each employee's quality of work life. For instance, employees are frequently taken aback by unfavorable yearly performance evaluations. Although yearly evaluations may also be a part of performance management, there should be fewer unpleasant shocks thanks to the continual feedback that managers give throughout the year.

IV Discussion

T. Kidd [11] noted that technological evolution has caused:

- 1) step-by-step development of e-learning;
- 2) influence on electronic learning of connectivism as a theory of learning in the age of digital technologies.

In the theory of connectivism, the role of the social and cultural context for learning is emphasized, because learning in the age of digital technologies does not just happen within an individual, but within networks and between networks.

With an emphasis on connectivism, Kidd [11] singled out four stages of the development of e-learning:

The first stage is the early stage of e-learning - using auxiliary programs, teaching the content of educational subjects using a computer. On the computer, teachers demonstrated their own developments to students. Students perceived the material passively.

Stage I – 1980s. For the first time, multimedia communication applications were developed that involved interaction between students and computers. The process of developing educational software and its use has begun. During the study, the students were still passive.

Stage II – 1990s. Intensive development of the Internet, offering online courses based on the Internet, introduction of active learning based on group discussions, using online forums. The role of teachers and lecturers has shifted from providing passive teaching to administration, discussion, and learning. Student interaction in that period was characterized as existing, but limited by the number of participants.

Stage III – the beginning of the 21st century. The development of social networks has led to the formation of more flexible interaction between the participants of the educational process and to wide connections between students and communities. The learning process takes place within and between networks [15].

The following list of advantages of e-learning has been compiled:

– Economic benefits for a sustainable society: the economic efficiency of e-learning in terms of reducing the cost of education and promoting lifelong learning to ensure the continuous development of the intellectual potential of members of society.

– Pedagogical advantages for lecturers: the possibility of electronic learning platforms to register data on the results of the participation of pupils and students in various types of online activities; the ability to implement

synchronous and asynchronous processes during online education; transparent and quick assessment, introduction of innovative teaching methods.

Advantages for the development of future teachers: the possibility of organizing online learning at one's own pace, in the self-determined order of studying the educational material, with the possibility of several one-time processing of educational material, without time and space limitations.

Organizational advantages for lecturers and future teachers: more efficient use of time resources, manifested in a quick change of virtual professional or educational activities to participation in various educational or social events, visits to various institutions, organizations [18].

However, analysis of scientific sources also revealed a number of disadvantages of e-learning.

Scientists believe that e-learning has certain limitations:

1. Teachers and students need to have certain skills, knowledge, and experience in technology and teaching skills to deliver learning [3; 11].
2. The infrastructure of the e-learning system must be synchronous, efficient, and secure. This is required to support teacher-student interaction, data storage, and evaluation of learning performance [2; 11].
3. The digital nature of e-learning leads to less face-to-face interaction with lecturers, reducing the possibility of identifying the need for changes in the learning process and the individual structure of the learner [1; 10]).
4. The mental load during distance learning is much higher than during face-to-face learning [3; 9].
5. An analysis of the results of a survey of lecturers of the Borys Grinchenko Kyiv University and the Ivan Franko National University of Lviv revealed that the lecturers of these institutions also paid attention to the shortcomings of e-learning.
6. During the interviews, the lecturers emphasized the need for increased motivation of students due to the lack of "live conversation", personal contact of the students with each other and with the lecturers (Figure 6) [23].

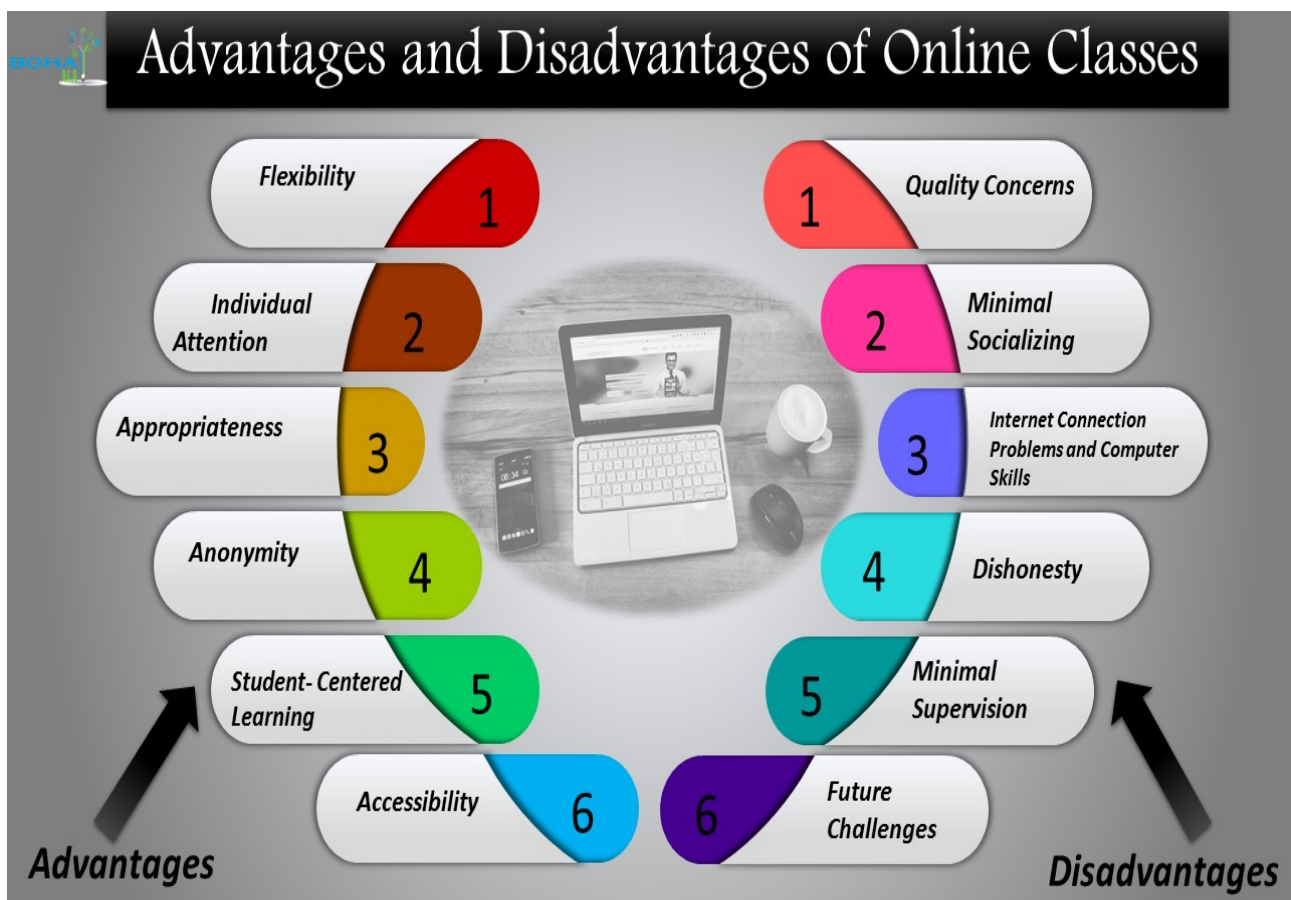


Fig. 6. Core Advantages and Disadvantages of E-learning

V Conclusions

As a result of the analytical activity, *the following conclusions were formulated:*

1. A high level of information literacy does not indicate a high level of the ability to independently search for information for professional and personal development.
2. In the period 2014-2015, for 65.1% of students, the beginning of the search for information for professional and personal development was caused by external incentives or factors.
3. The formation of the creative level of the formation of the skills to use information resources in the learning process is a prerequisite for a high level of information literacy.
4. The reproductive level of formation of the ability to use information resources in the learning process does not affect the formation of a high level of information literacy.
5. The ability of teachers to use information resources to organize creative educational activities of students contributes to the formation of a high level of information literacy.
6. A high level of tolerance to uncertainty when working with information does not correlate with a high level of information mobility and the ability to work with information.
7. The development of the ability to work with information is only partially influenced by a high level of tolerance to uncertainty when working with information and a high level of information mobility.
8. The ability to work with information includes the ability to identify information that is not enough to perform a task, solve a problem, the ability to formulate an information search request, the ability to work independently with information in printed or electronic format, the ability to separate main and secondary information in a text.
9. Formation of the ability to work with information is carried out on the basis of persistent interest in reading and analytical ability (Figure 7).



Fig. 7. Reasons to Use Simulation Outfit Business Game

The directions of development of the future teacher in the context of promoting the sustainable development of society in the conditions of the information economy are determined with the inclusion of following tasks:

1. To understand one's own involvement in the processes that affect the sustainable development of society.
2. Constantly be aware of the need for new knowledge and skills and satisfy appropriate needs for self-realization in the conditions of the information economy.
3. To understand that in the conditions of the information economy, learning takes place “not just within an individual, but within networks and between networks” (T. Kidd (2010)).
4. To understand the impact of the existence of real and virtual spaces on the formation of new forms of learning.
5. To perceive e-learning both as an integration of technology, education and economy, and as an opportunity to learn at own pace, without time and space limitations.

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