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ANALYSIS OF THE SITUATION AND PROBLEMS OF TEACHING ENGLISH LANGUAGE TO TECHNICAL UNIVERSITY STUDENTS

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ABSTRACT

Today, society is experiencing an urgent need for competent specialists who know ICT (information and computer technologies) and one or more foreign languages, both in everyday communication and in the professional sphere due to the rapid process of globalization and informatization of society.

Key words: *education, process, language, "language across curriculum".*

Knowledge of several foreign languages is considered in demand, since the skills of oral and written communication in foreign languages provide an opportunity to acquire prestigious work and study at European universities. Thus, today in the education system, bilingual education is actively developing, namely: teaching foreign language within a certain subject area - content language integrated learning (CLIL) - subject-language integrated learning. We will cover the following issues:

In the process of globalization, the rapid spread of information sources, the colossal increase in the amount of information of social importance (scientific, technological, cultural, etc.) will have an impact on any society. Conditions for the emergence of new types of information technologies, along with traditional information technologies based on the creation, transmission, reception, storage, processing, reproduction, automation of processes and presentation of information in the form of books, newspapers, photographs and films in the production of information and communication technologies. created.

Let us turn to the history of the emergence and development of subject-language integrated learning. The term CLIL was introduced by D. Marsh in 1994 [5, 32]. According to the author, this concept implies a learning process when disciplines or certain topics within these disciplines are studied in a foreign language. At the same time, several goals are realized: the study of the content of this academic discipline and the simultaneous study of a foreign language. A number of reasons that served as the starting point for the development of CLIL are geographic, democratic and economic. As an example, authors studying and implementing this methodology in the teaching process cite the French-speaking province of Quebec. In 1965, a group of English-speaking parents living in the provincial French-speaking province of Quebec were worried that their children would be disadvantaged in the future if they were unable to speak and write fluently in French. The English-speaking heads of these families felt that standard teaching in a second language was not conducive to fluency in the grammatical and lexical structure of the French language. As a result, according to representatives of these families, children will not be able to compete in the local labor market. Thus, these families approached the local authorities with a request to develop a language immersion program that would allow English-speaking children to study all subjects in French. Initially, teachers working with this immersion program faced a major problem: there was no agreement on appropriate teaching and learning strategies. Later they were developed by trial and error. The primary task of teachers was to organize assistance to students in understanding a second language, namely the development of oral communication skills. A more balanced and methodological approach, which included all four language skills (listening, speaking, reading and writing), was introduced after the students had acquired the basic skills of speaking and listening in a foreign language, sufficient to provide basic communication. Overall, the program has been very successful.

REFERENCES

1. Rabinovich F.M., Sakharova T.V. Intensive teaching methods and high school. - Foreign languages at school, 1991, No. 1.
2. Merkulova I.I. The system of problem tasks in teaching reading // IYASH, 1991, No. 6.
3. Milrud R.P. Discussion of the problem in the lesson of a foreign language // IYASH, 1986, No. 4.
4. Mirolubov A.A. Palmer's method // IYASH, 1995, No. 1.
5. Mirolubov A.A. Audio-lingual method // IYASH, 1995, No. 4.
6. Rabinovich F.M., Sakharova T.V. Intensive teaching methods and high school. - Foreign languages at school, 1991, No. 1.
7. Denisova L.G. The place of intensive methodology in the system of teaching a foreign language in high school. - Foreign languages at school, 1995, No. 4.
8. Dianova E.M., Kostina L.G. Role-playing game in teaching a foreign language (review of foreign methodological literature) // IYASH, 1988, No. 3.
9. Theory of teaching foreign languages: Linguodidactics and methodology: textbook / ND Galskova, NI Gez.-6th ed., Sr.- M.: Academy, 2009.-333c.



UNDERSTANDING OF HUMAN PSYCHOLOGY AND PERSONALITY ETHICS

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ANNOTATION

Everyone is surrounded by people from his birthday, lives in a certain community - in the family. A person, developing in society, entering into a relationship with other people with the help of language, becomes a person – a person who knows reality, as well as a subject that changes it. We introduce all people - normal people, a newborn, mentally retarded into the notion. But we cannot call them all individual. We call the person who is engaged in some useful work in society a person. Treating a person as a person is a manifestation of the relationship between people and things around him, in their production activities, in the relations that arise between people. In this article, thoughts and opinions about human psychology and ethics of a person are discussed.

Keywords: *human psychology, personality Ethics, Society, temperament, character, individuality.*

A person begins to form as a person only in relationships with other people. This means that a person is a perfect person who lives in a society of personality, is engaged in some kind of activity, is able to communicate normally with people around him through language, his consciousness is highly developed. One of the most important aspects of a person's personality is his individuality. Individuality is an irreversible combination of several qualities of an individual. Its composition includes character (nature), temperament (client) abilities, the sum of emotions, habits. As soon as a person enters into different groups, he performs different tasks in roles that are not similar to each other. If some children are masculine, capricious in the family, then in school there will be a modest, kind, cheerful among peers. A person who walks very seriously at work can go on a trip joking, being an entertainer. Often a person manifests similar qualities in different situations. In our society, the description given to the individual is determined by his attitude to the process of building a developed society and his real participation in this process. The change of psychological states of a person is a link to the external environment and social upbringing. Relatively stable and relatively variable characteristics of the personality form a complex unit, that is, a dynamic structure, consisting in the unity and interdependence of individual qualities.

Psychological study of a person takes into its composition the solution of two main scientific issues:

1. To determine the individual structure that distinguishes each individual from other people. This makes it possible to take the behavior in advance.

2. A person requires several parts of the structure of the personality. The sum of these parts forms the human personality. In modern foreign psychology, the theory that distinguishes the two main parts in a person, composed by the influence of two factors, namely biological and social factors, occupies a prominent place.

The person will be in an active relationship with the rabble-the surrounding world because of his activity. When a person says activity, the effect that a person shows on the surrounding external environment is understood. With the external environment, not only people, animals also interact. But animals live by adapting to the external environment, and people are also able to change it, without adapting to the external environment. The activity of the individual is manifested in his various interests, needs. Freud understands that personality

activity is as follow: "man is active because of the manifestation of instinctive inclinations that have passed down the genealogical path from his offspring. Instinctive inclinations are manifested mainly in the form of sexual instincts. Freud associates the activity of the individual with sexual inclinations. The scientific psychology of the present time correctly solves the activity of the individual. In their opinion, the main source of human personal activity is in his needs. The needs of a person motivate him to show activity.

The activity of a person is also manifested in his interests. Curiosity is the relationship between an individual's knowledge of something and phenomena in the higher nervous activity, the desire to understand. Interests are material, spiritual, negative, positive, lasting, short- lived. We need to educate the need for labor in young people. The behavior of a person's personality becomes his own motivations. Motivation is a tendency to some kind of activity that is associated with meeting certain needs. If the needs throw the Moss of human personality activity, the motivations are an indicator of the manifestation of this moss. The needs of the individual are related to motivations. Therefore, motives differ from each other depending on the type of need. For example, there may be motivations that are associated with the satisfaction of material needs, or motivations that are associated with the satisfaction of spiritual needs.

According to supporters of the biogenetic direction, human personality and personal characteristics occur only by one factor, the influence of hereditary characteristics. They do not recognize the role of the external environment and education. They recognize the influence of external environment and biological factors, saying that the composition of the individual depends only on the influence of Education. In the second half of the XIX century came into the flow called biogenetic law. Biogenetic law is a mass law inherent in biology. According to this law, a person will go through many millennia of evolutionary development until he is born from the winter of the mother, that is, he will repeat the path of long evolutionary progress in the short term.

Social environment is primarily a family environment, the child lives in a social relationship, surrounded by people from the day of birth. A person absorbs various social relations from the external environment through his activity and becomes a person of his own nature. All children are engaged in recreational activities. The game is a tool for children to know the world. He plays by imitating the behavior of adults. The impact of the social environment on personality formation is strong. For example, if a newborn child is attached between animals, the behavior is similar to that of animals. The language of the child also depends on the social environment.

Features that go from parents to children through heredity affect as an auxiliary factor. Innate dignity is given in the form of opportunity by a pedigree. These opportunities arise only when there are certain conditions. This means that the first of the factors that actively influence the composition of a person is the external social environment, the second is the education that is given to a person for a long time, and the third is the heredity that is given to a person from birth, that is, the hereditary property. In addition, personal activity is important in the formation of an individual. Man is formed through self - education, self-awareness.

REFERENCES

1. Karimova V.M. Social Psychology. The textbook.- T.: "Science and technology", 2012. – 176 b.

2. Gaziyeu E.G`. Psychology (psychology of age periods). T., Teacher, 1994.
3. Dostmukhamedova Sh.A., Toychiyeva S.M., Mevlonov. M. Age periods and pedagogical psychology. T.: TDPO, 2004 y.
4. Shcherbakov A.I. From young psychology and pedagogical psychology. Tashkent, 1991.



SYSTEM OF IMPROVING PSYCHOLOGICAL PREPARATION OF STUDENTS FOR PROFESSIONAL ACTIVITY

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ABSTRACT

The article is aimed at studying the system of improving the psychological readiness of students for professional activities. It also analyzes a number of scientific sources on general methodological and theoretical issues related to career choice, career guidance, understanding and definition of professional identity. The research focuses on the specific characteristics of individuals with motives for action in three areas. Self-direction.

Keywords--*students, professional activity, profession, professional formation of students "self-orientation", "people-oriented", "activity-oriented", personal viability, professional viability.*

I. INTRODUCTION

The attitude of university students to the profession, professional development and professional development is of great social and economic importance, which directly determines its scientific, spiritual, material potential, domestic and foreign policy. Also, this problem is one of the problems that need to be studied in a comprehensive and consistent manner, and based on this, appropriate measures and long-term plans should be developed. Because career choice, career guidance, professional diagnosis, the formation of young people as professionals, and professional development are always in the focus of government, but it is extremely important for an individual to think about his or her own future.

As we explore the question of interdependence in the professional formation of the individual, we must recognize that research has entered its critical phase today. This is because there are many studies that examine career choice, career guidance, career development, career management, and other issues of career development, and so on.

The analysis of scientific sources shows that a number of researches have been carried out on general methodological and theoretical problems related to career choice, career guidance, understanding and definition of professional identity, including: L.A. Aza, G.M. Belokrilova, A.E. Golomshtok, V.I. Zhukovskaya, E.A. Klimov, M.X. Titma, P.A. Shavir, M.G. Davletshin, N.Sh. Shodiev, B.R. Qodirov, E. G'. Gaziev et al [4].

A number of studies are devoted to the study of career choice, professional suitability and professional self-awareness, the psychological requirements of professional activity and the psychophysiological basis of individual activity, the formation of professional interests. In these directions M.H. Titma, E.A. Klimov, V.G. Maksimov, A.P. Chernyavchikaya, E.A. Golomshtok, K.M. An example is the research work of Gurievich, N.D. Levitov and others [1]. The problems of professional psychology have also been seriously studied by Uzbek scientists. In our country, teachers and

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psychologists have conducted a number of studies in this area, which include: vocational guidance of students (MG Davletshin, diagnostics of professional activity), (BR Kadyrov, KB Kadyrov, occupational psychology and

its ethnopsychological aspects) , EG Goziev, Development of professional interests in young people trained in technical professions [3]; formation of professional characteristics in students (A. Jabbarov) [4]; on the conditions of vocational guidance of students (P.T. Magzumov, vocational training of students (E.T. Choriev, the organization of vocational guidance of students (N. Shodiev) and others [1].

On the study of the philosophical and psychological nature of the profession, K.B. Kadyrov conducted scientific research. In his research, he has not limited himself to analyzing the issues of professional diagnostics, but has been able to briefly interpret the psychological nature of the professional works of our generation and ancestors. He conducted a phase of professional counseling, i.e. experiments in occupational diagnostics, and in his research he covered the process of professional activity in general psychological, differential psychological and psychodiagnostic [2].

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Having studied different stages of professional activity, AM Jabborov studied the formation of professionally important personal qualities of future cotton growers in student production brigades [4], RZ Gaynutdinov studied the professional development of Uzbek school teachers, the development of professional interests in young people trained in technical professions (E.N. Sattorov); B.N. Sirliiev and Sh.B. Saparov studied the professional formation of teachers and masters of vocational schools [1].

B.N. Sirliiev's research is aimed at studying the psychological aspects of professional development of masters of secondary special vocational schools, in which a psychological analysis of the relationship between the personal and professional characteristics of masters and their stages of professional development [4].

While focusing on the professional development of the individual, the author describes it as a dynamic and multi-level process. According to him, the process of maturation consists of four stages, the transition from one to the other takes place on the basis of the previous ones. The first stage is associated with the emergence of a professional intention, which arises and is formed under the influence of the initial professional orientation and general development in various spheres of labor. The psychological dimension of this stage is the choice of profession and specialty. The second is vocational education and training, that is, purposeful preparation for the chosen professional activity. It includes professional self-determination as a psychological criterion. This reflects the institution of professional development. The third stage is the introduction of a profession characterized by active acquisition of the profession and finding its place in the system of the production team.

The fourth stage is the full or partial manifestation of the individual in independent labor. The psychological indicator of this stage is the opportunity to master professional skills.

In research in Uzbek psychology, a problem closer to the one we are studying can be observed in the research of DN Arzikulov. The researcher touched upon the problem of professional development of future agronomists studying at the university. His research focuses on the psychological analysis of the development of personal and professional qualities in professional development, but the study does not reveal whether students

really fit into their chosen profession, what are the main barriers to their professional formation and factors influencing the formation of a specialist. Given the above, we will also focus on these issues in our research [1].

From the analysis of professional identification research, it can be concluded that each stage of professional activity should be viewed as a system. T.M.Buyakas, N.D.Levitov, O.N.Rodina in their research pay special attention to professional counseling, which is one of the stages of professional development, evaluate it as a guide

in the process of adaptation to a particular professional activity and explain the effectiveness of activities in relation to individual abilities [4].

In our research, we focused on identifying students' perceptions of career formation today, the factors that lead to career choice and what influences career choice, the levels of career motivations, personal and professional goals, interests, and professional decisions. However, so far scientific research has revealed that there are various reasons for choosing a profession. When analyzing adolescents' perceptions of professional identity, it was found that there was a shallowness in their perceptions of occupations. In addition, we need to keep in mind the factors of influence of the educational environment and others between the process of choosing a particular profession and the understanding of professional identity. The dialectical connection in these interaction processes alone is an indication of the complexity of this issue. For example, there are a number of stages in the organization of a single professional counseling:

- a) At the stage of vocational education, a person receives information about the organization of labor, recruitment requirements, occupation of various professions, stages of their training and duration of training, wages and prospects of the profession.
- b) at the diagnostic stage, the suitability of the person's interests, abilities, abilities and goals in relation to his chosen profession is studied;
- c) the student or person who chooses a profession at the formative stage is guided, deviations in career choice are prevented and corrections are made;
- (g) To determine the appropriateness of medical health to the profession and, at the psychological level, the appropriateness of personal qualities to the profession of their choice. P.A. According to Shavir, the definition of a person's professional identity requires the ability to meet future professional requirements, self-assessment of professional suitability, increase the level of willpower, love of work and life experience.

The fact that the study of the problem of the profession has a wide range of its own research subject can be seen in the research work carried out to date. It is noteworthy that these studies have been conducted for several years and the scale of the results obtained from them. Comparing them with the results of today's research will enrich our achievements in this area. However, the issue of the impact of students' professional perceptions on professional formation and adaptation to professional activity is one of the most pressing issues today. There are also a number of studies that focus on the psychological aspects of a person's professional development [20]. There are various approaches, scientific conclusions and special methodologies in the study of professional

activity as a subject of psychological and pedagogical research.

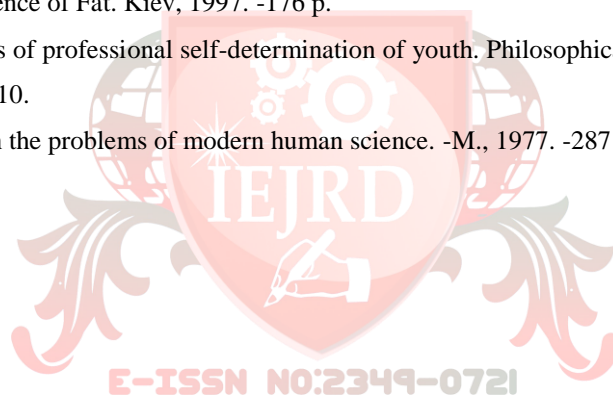
RECOMMENDATIONS

To prevent shortcomings and deficiencies in the process of personal and professional formation of students in higher education institutions, to organize courses on professional training in psychological service centers and to

ensure that leading specialists work in them. Introduction of a perfect "Professional Perspective Map of Personality" of professional formation, which takes into account any changes in professional activity, the purpose of which is of general importance, serves to the corre

REFERENCES

1. Arzikulov D.N. Psychological peculiarities of professional maturity: Avtoref.psix.fan.nomz.dis.T.2002.- 137.
2. Asamova RZ Motivation to choose a profession and its dynamics // Diss. psychol. fanl.nomzod.- Toshkent, 2002.-138 p.
3. Gaziev EG Psychological foundations of the development of self-learning by schoolchildren and students. Abstract. Dis .. Doct. ps. sciences. M.: 1992.- 38 p.
4. Zhabbarov A.M. Psychological foundations of the formation of professionally significant personality traits of the future cotton grower in student production teams: Abstract. dis ... cand. psychol. sciences. – Kiev, 1999.-27 p.
5. Abramova G.S. Practical psychology. Textbook for university students. - Ed., 6th., Revised. and additional ..- M.: Academic Project, 2001.- 480 p.
6. Adler A. The Science of Fat. Kiev, 1997. -176 p.
7. Aza L.A. Features of professional self-determination of youth. Philosophical and sociological thought.- 1989.-No. 6.-p 3-10.
8. Ananyev B.G. On the problems of modern human science. -M., 1977. -287 p.



NON-INTRUSIVE LOAD DISAGGREGATION METHODS FOR LOW-RATE SMART METER DATA

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ABSTRACT

Smart meter technology presents an opportunity to gain better insights into consumer appliance usage and consumption behaviour. Load monitoring can provide valuable data on appliance specific energy consumption statistics which in turn will be useful for the consumer to evolve an optimum energy utilization strategy. In the utility point of view, the data acquired in this manner could be used to evolve better target demand side management programs, including demand response and energy efficiency. Non-intrusive load monitoring (NILM) is a consumer energy disaggregation technique that segregates individual appliance energy consumption from the total energy measured at the mains. Unlike intrusive load monitoring, it does not require separate meters to measure individual device consumption. This field has garnered lot of research interest recently, owing to emergence of smart grid technologies and advances in smart metering. Machine learning algorithms are predominantly used to solve NILM problems. In view of concerns regarding customer privacy and economics, low frequency smart meters are preferred. There are many challenges involved in using low granularity data for NILM algorithms. This work summarizes the current state of the art of NILM methods for low rate smart meter data. The limitations of the present methods and scope for future work are also presented.

Keywords— Energy disaggregation, Non-Intrusive Load Monitoring (NILM), Smart meters, Data granularity

INTRODUCTION

In India, residential sector represents around 24% of the total energy demand. According to Energy Efficiency Services Limited (EESL), 25 crore conventional electricity meters will be eventually replaced with smart meters across our country [1]. Smart energy meter is an electronic device which records aggregated consumer electricity consumption and reports in short intervals of time. It is deployed at the utility service entry. It enables two-way communication between meter and the electricity distributor.

Electrical energy consumption pattern of a consumer can be meticulously investigated by duly monitoring all individual appliances operations. Non-intrusive load monitoring (NILM) is the process of disaggregating the total electricity consumption measured at the mains into constituent appliance consumptions with the help of electrical data acquisition system and signal processing algorithms. The aggregate data is received from the main electric panel using smart meters. It is non-intrusive since the method does not require any meter installation at device levels. Research on NILM started during 1980s in Massachusetts Institute of Technology (MIT) by George W. Hart [2]. This idea got a fresh impetus recently due to the vast advancements that happened in the fields of smart meters, improved computational power and advances in machine learning and statistical techniques.

Non-intrusive load monitoring has many potential applications from both energy companies as well as their customers. Customers will have a detailed bill information without investing for individual meters for their appliances. This will help the customer to plan for energy savings and reductions in electricity bills. NILM results can be used to identify malfunctioning of customer appliances. It can be also used for occupancy detection. While planning for demand response, distribution companies can identify potential customers with the help of their

disaggregated load data. They may also identify critical loads like electric vehicle charging, so as to plan for upgradation of elements like distribution transformers [3].

All NILM approaches follow three steps namely data acquisition, feature extraction and load classification and energy disaggregation. Data acquisition unit measures the aggregated energy consumption and with the help of signal processing techniques data is pre-processed and cleaned. There are two categories of smart energy meters available to do the job- high frequency meters and low frequency meters. High frequency energy meters measures aggregated energy at sampling rates from 1Hz to kHz ranges. They are expensive due to complex hardware and are custom-made to extract extra features from the signal [4].

PROBLEM STATEMENT

Problem statement of NILM is given in (1):

$$\hat{x}(t) = \sum_{i=1}^n x_i(t) + e(t) \quad (1)$$

where $\hat{x}(t)$ is the aggregate electrical signal, n is the total number of appliances, $x_i(t)$ is the individual appliance contribution and $e(t)$ is the noise that includes measurement errors and all unknown appliances. In most of the cases, the electric signal will be active power. NILM can be classified as a single-channel Blind Source Separation (BSS) problem. In this case, aggregate power consumption signals flow through the electric line from the multiple devices to the smart meter [5].

NILM Framework

Every electrical appliance demonstrates a distinctive energy pattern termed as appliance signature. Based on the operational states, electrical appliances can be classified into five types. Type-1 appliances have two states of operation namely ON and OFF. Lamp, toasters are typical examples of this category. The second category consists of Finite State Machines having finite number of operating states. Washing machine is a multi-state FSM device. Type-III devices do not have fixed number of states and draw variable power during their operation. They are also known as Continuously Variable Devices. Power drill is an example of continuously variable devices. Permanent consumer devices are called Type-IV devices since they are active permanently. Refrigerators and telephone sets are example for permanent consumer devices [6].

According to the literature survey, NILM process consists of three stages as shown in figure.1. They are electrical signal acquisition, appliance feature extraction and appliance classification.

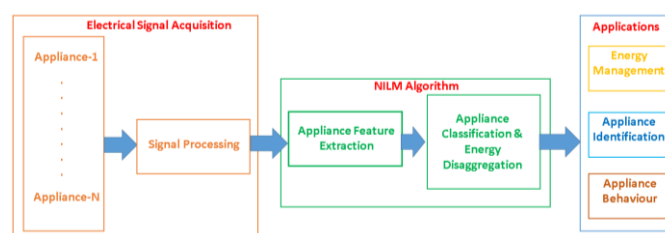


Fig.1. NILM framework

Data Acquisition

This module acquire the aggregated energy consumption pattern at fixed intervals of time. This is usually done by smart meters. They are classified into high sampling rate meters and low sampling rate meters. Data collected by high sampling rate meters have frequency greater than 1Hz. Most of the smart meters deployed now-a-days are of low sampling rate type. They have sampling rate lower than 1Hz and in many cases data is collected once in several minutes or even hours [3].

There are many public energy disaggregation datasets available in literature. They are collections of realistic energy measurements taken from real-world scenarios. Some of the popular datasets are REDDIT, REFIT, BLUED, UK-DALE and BLUED [7].

Feature Extraction

In this step, event detection module extracts various events by analysing changes in power levels. Features are derived with the help of these events. The features can be steady-state, transient-state or non-traditional features. Steady-state features such as variations in real power and reactive power that are obtained from the steady state operation of the appliance. Transient-state features are extracted from the transient state operation of the device. They can be current spikes, transient response time etc. Characteristics like time of operation of a device, correlation of usage of different devices are examples of non-traditional features [3].

APPLIANCE CLASSIFICATION AND ENERGY DISAGGREGATION

Once the required features are extracted from the raw energy data, appliance specific states are identified using load identification algorithms. Appliance classification methods can be either supervised methods or non-supervised methods [8].

i. Supervised disaggregation methods

They require pre-labelled data for training the classifier. They are classified into optimization approaches (simultaneous matching) and pattern recognition (one to one matching) approaches [8].

In case of optimization based approaches, extracted features are compared with the appliance features stored in the data base. Integer programming and genetic algorithm are reported in some of the NILM literatures [9], [10], [11], [12].

Pattern recognition approaches detect the most probable state of the suitable device states. Most of the work on NILM are based on pattern recognition methods. The pioneering work in NILM led by Hart was based on pattern recognition method [6]. Various device-specific features of different devices are stored in a database. Devices form specific clusters in P-Q plane. Steady-state changes of P and Q are mapped to the feature space. Clustering analysis is conducted to identify different appliances. In 2012, Weiss et al. added distortion power as a feature [13]. Bayes classifiers were used by Marchiori et al. Artificial Neural Network (ANN) based NILM and Hidden Markov Models (HMM) are also being used in pattern recognition based NILM [14], [15], [16]. In case of low-rate data Support Vector Machine (SVM) performs well for disaggregating loads [17], [18].

ii. Unsupervised disaggregation methods

They do not have pre-training procedures. In this method, the prior data which are trained before testing part, in case of supervised methods are extracted from the test data itself. They are non-event-based methods and tries to disaggregate the appliance consumption directly [19]. Blind Source Separation technique, Motif Mining approach and variants of Factorial Hidden Markov Models FHMM) have been used in unsupervised approach of energy disaggregation problems [20], [21], [22], [23].

Challenges

NILM is a contemporary and evolving area of research. Some of the challenges faced in this area are the following:

1. Sample rate of raw data: The accuracy of NILM algorithm increases with the input sample rate. Residential smart meters usually saves data at 15min to 1h time intervals. NILM algorithms are developed for

specific sample rates. Sample rates above 1Hz are known as high frequency samples and those below 1Hz are called low frequency samples. Electrical signature extraction is difficult in case of low rate samples.

2. Compilation of representative electrical characteristics: For feature extraction and classification, researchers have used many electrical parameters like energy, active and reactive powers, current and voltages, power factor, harmonic distortions, electromagnetic interference etc. Generic smart meters usually measures active powers alone. Advanced electrical characteristics requires expensive measurements at very high frequencies.

3. Discriminating similar characteristic devices: Practically it is difficult to differentiate devices having similar power levels. Instances where multiple operations of ON and OFF of devices and simultaneous operation of similar devices leads to incorrect models.

4. Different types of appliances: Different houses have machines of different makes. Also devices varies in their modes of operations. Classification of appliances in this scenario is a difficult task.

5. Noise: There can be noise in the measured electrical signals due to harmonics, voltage fluctuations in appliance consumptions, noise due to change of state of operation etc.

6. Dynamic and changing consumption pattern: Consumer behaviour is dynamic. For example household consumption on weekdays and weekends are different. Also appliance may be replaced in long term.

7. Computational cost: NILM algorithms have to process online data and generate the results in real-time. This will be computationally expensive.

8. Availability of city-specific datasets: There are a lot of public electrical disaggregation datasets available. However data specific to only a few cities are available in open domain.

NON-INTRUSIVE LOAD DISAGGREGATION METHODS FOR LOW-RATE SMART METER DATA

Low frequency energy meters measures aggregate energy at a granularity of 1s and above. Popularly used smart meters are of this category due to government regulations on privacy issues. Also they are economical. Implementing NILM using low rate input data have many challenges.

1. During data acquisition process, type of information that can be extracted from a signal depends on its sampling rate. Using low rate meters, only tradition power metrics like active and reactive powers can be measured.

2. In case of low frequency data, during feature extraction process transient features like shape, harmonics etc. cannot be extracted. Steady state signatures only can be extracted in this case.

3. Identifying low power appliances with overlapping steady-state features or those turned on at nearly same time are difficult in case of low rate aggregated energy input.

In the following sections literature survey on NILM solutions to low granular aggregated energy input data is presented.

Non-intrusive load disaggregation solutions for very low-rate smart meter data using optimization, graph signal processing and convolution neural network algorithms [24]

In 2020 Zhao et al. proposed three load disaggregation algorithms based on optimization, graph signal processing and convolutional neural networks. They focused on hourly electricity data for a period longer than one year [24].

The proposed optimization based (OPT) approach did not have training of model. The inputs taken were aggregated load data, and appliance details. The entire method was divided into two steps. In the first step, always-on devices were estimated and removed. In the second step the consumption of remaining devices were estimated.

Aggregate load is given as (2):

$$E_i = \sum_{m \in M} E_i^m + \sum_{m \in N} E_i^m + n_i \quad (2)$$

where M is the total number of devices that are always-on, N is the set of other devices, n_i is the noise due to measurement error and unknown devices. Separating the always-on devices as (3)

$$\hat{E} = E_i - \sum_{m \in M} E_i^m \quad (3)$$

Then the optimization problem can be written as (4)

$$\arg . \min \sum_{i=1}^N |\hat{E} - \sum_{m \in N} E_i^m| \quad (4)$$

where N is the total number of samples to be disaggregated.

In the proposed algorithm initially always-on loads were estimated focussing on 12 AM to 5 AM consumption. In the subsequent steps, always-on loads were not deducted from the dataset. In the next step, appliances were modelled under two categories based on the appliance ratings. The first load category like washing machines had pre-set modes of operations or consumed almost constant energy during usage. Loads having constant rated power; but variable duration of use like computers were considered in the second category. In the last step of the algorithm not-always-on devices were disaggregated by solving the optimization problem given in (2.3). The algorithm is shown in figure 2.

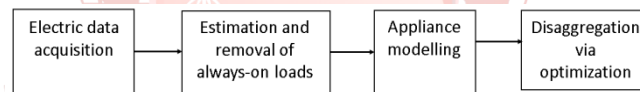


Fig.2. Schematic for OPT algorithm [24]

The authors of [24] proposed a second disaggregation algorithm based on unsupervised Graph signal processing where clustering was conducted by generating two graphs. Once all samples were clustered and labelled, disaggregated load profiles were evaluated using relative standard deviation, RSD.

In the third approach proposed by the authors of [24] Convolution Neural Network (CNN) was used. Hourly aggregate power consumption and encoded cyclical continuous absolute time features were used as inputs. Window length was set to 7h and three CNN blocks were used.

Optimization based algorithm and Graph Signal Processing based algorithms were implemented in MATLAB 2016a and Convolution Neural Network approach was implemented in Python. Public load disaggregation dataset REFIT was used as raw data for all the three algorithms. The implemented algorithms were benchmarked against Factorial Hidden Markov Model, combinatorial optimization and discriminative disaggregation sparse coding methods.

It was concluded that CNN based algorithm and optimization-based algorithm exhibited better disaggregation performance. CNN based method was faster compared with OTP. Since CNN is a supervised method, it requires prior training using sub-metered data which is not required for OTP based and GSP based unsupervised methods.

Data mining of smart meters for load category based disaggregation of residential power consumption using genetic algorithm [25]

Zhang et al. proposed an unsupervised load-category-based disaggregation method that used hourly smart meter data [25]. With the help of clustering and optimization methods, load signatures were extracted using active and reactive powers. Appliance details were not taken as input in this method. From the aggregated active and reactive powers obtained from smart meters, signatures of possible load categories were extracted. Using Weighted Least Squares method, individual load categories based on similar average power factors were separated. Final disaggregation of active and reactive powers for load categories were implemented using optimization approach based on Genetic algorithm.

Disaggregation of active and reactive powers are expressed as (5) and (6).

$$P^{(t)} = \sum_{i=1}^N x_i^{(t)} + \epsilon_P \text{ for } x_i^{(t)} \in [x_i^{\min}, x_i^{\max}] \quad (5)$$

$$Q^{(t)} = \sum_{i=1}^N x_i^{(t)} \tan(\theta_i) + \epsilon_Q \quad (6)$$

where $x_i^{(t)}$ is the real power of the i th appliance at time t , θ_i is the power angle, N is the total number of load categories, ϵ_P and ϵ_Q are the errors involved and x_i^{\min} and x_i^{\max} are the minimum and maximum limits of $x_i^{(t)}$. Disaggregation method proposed by Zhang et al. is shown in figure 3.

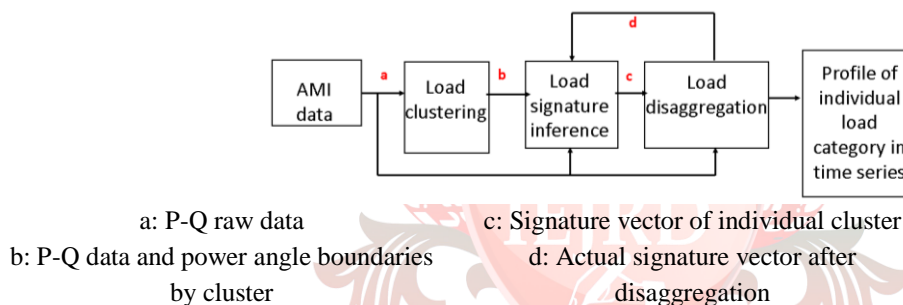


Fig.3. Disaggregation structure of the proposed algorithm [25]

Fig.2.2 Disaggregation structure of the proposed algorithm [25].

The algorithm was implemented in MATLAB 2015b. Public dataset- Pecan Street database was used as input raw data. Accuracy of 80% for main load categories and F-measure classification metric of 59-81% were achieved using this method.

The work was focused from utility point of view so as to investigate loads that affect power quality, deduce critical loads like electric vehicle charging etc.

Electricity usage profile disaggregation of hourly smart meter data using k-nearest neighbours algorithm [26]

In 2018 Zhao et al. proposed supervised K-Nearest Neighbours (KNN) based energy disaggregation method for 15min to 60min granularity of smart meter data [26]. The method used features like statistical measures of energy signal, appliance time usage profiles and reactive power consumptions.

Total energy consumption within the i th time interval is given by (7).

$$W_{Pi} = \sum_{m \in M} W_{Pmi} + n_i \quad (7)$$

where W_{Pmi} is the energy contribution by the m th appliance, M is the total number of appliances and n_i is the noise due to measurement error and unknown appliances. Features were extracted by training process using sub-metering data. Relative standard deviation was used to verify the quality of each feature extracted. During testing phase, distance- $d(.,.)$ between each hourly test data y and all samples of training data x_i were calculated.

Minimum distance calculated as per (8) is calculated for all possible candidates and selected neighbours x classified appliances.

$$d_y = \min\{d(y, x_1); d(y, x_2); \dots; d(y, x_k)\} \quad (8)$$

Schematic of the algorithm proposed in the above work is shown in figure 4.

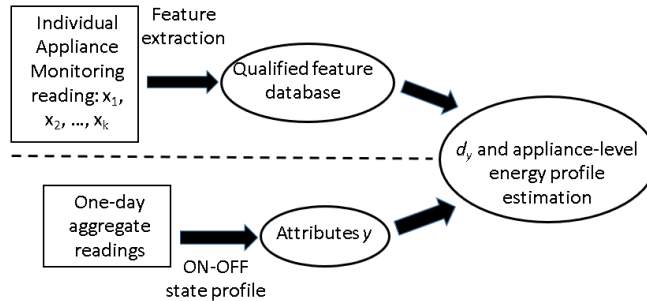


Fig.4. Schematic of the proposed algorithm based on KNN [26]

The algorithm was tested on REDD, REFIT and AMPDs public datasets. It was found that the methodology could disaggregate around 62% of the daily energy consumption with noisy data.

Unsupervised algorithm for disaggregating low-sampling-rate electricity consumption of households using device usage estimation algorithm [27]

Howlweger et al. proposed an unsupervised person-centric load disaggregation algorithm called Device Usage Estimation (DUE) algorithm based on Markov model [27]. The method was based on activities of inhabitants by grouping appliances together based on common activities. General household data and energy measurements were taken as input.

With the assumption that children below 10 years of age had little energy consumption, activity chains for individuals above 10 years were generated with the help of Markov model. Once characteristics of the household and probabilities of activities were known, appliances that could be ON were predicted with the help of aggregated load pattern. Using this method, power consumptions of eight categories of devices were estimated. Various device categories were cooking, entertainment, fridge, heating, housekeeping, ICT, light and standby.

According to Markov chain, if a system has $x \in S$ states the probability of switching from state S_i to S_j element of transition matrix is given by (9).

$$a_{ij} = p(x^t = S_i | x^{t-1} = S_j) \quad (9)$$

Initial probability distribution is given by (10).

$$\pi_i = p(x^0 = S_i) \quad (10)$$

Elements of emission matrix, where y is the external variable through which system can be observed O_k are the multiple states of y , is given by (11).

$$b_{ki} = p(y^t = O_k | x^t = S_i) \quad (11)$$

In the proposed algorithm, transition matrix and initial probability matrices were dependent on type of the day i.e. weekday or holiday and on household characteristics like employment state, age group etc. General workflow of the algorithm is shown in figure 5.

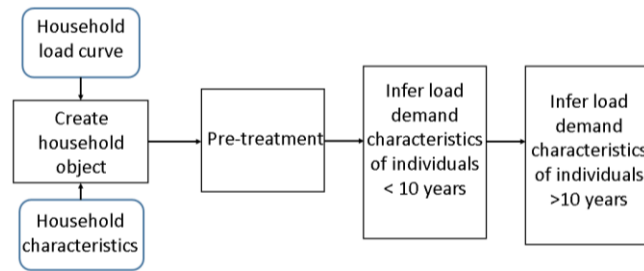


Fig.5. General workflow of load disaggregation using DUE algorithm [27]

Based on the household load curve and characteristics, household object categories were generated initially. Then pre-treatment process was conducted to remove standby loads and refrigerator loads. The resultant data were used to extract person-centric demand characteristics of individuals above and below 10 years of age.

The algorithm was benchmarked against four methods namely combinatorial optimization, factorial hidden Markov model, graph signal processing and discriminative disaggregation via sparse coding. Test datasets used were ECO, SMARTENERGY.KOM, and UK-DALE. Data sets with sample rates of 15min were used for the proposed algorithm. It was concluded that supervised algorithms outperforms unsupervised ones. Prediction uncertainty for DUE method was under 20% and did not suffer from computational limitations.

An optimisation-based energy disaggregation algorithm for low frequency smart meter data [28]

An optimization-based energy disaggregation method was proposed by Rottondi et al. in 2019 [28]. The work focused on two drawbacks of supervised sparse optimization disaggregation algorithm proposed by Piga et al [29]. The original algorithm was based on assumption that power consumption of individual devices were piecewise constant over time. This assumption cannot hold true for low sample rate smart meter data. Also the method proposed by Piga et al. did not take into account the presence of unknown devices. Rottondi et al. modified the algorithm to so as to take into account low rate aggregated smart meter data and unknown devices.

Energy disaggregation problem as a blind identification problem for N devices problems can be modelled as (12) and (13).

$$y(t) = \sum_{i=1}^N y_i(t) \quad (12)$$

where:

$$y_i(t) = \begin{bmatrix} B_i^{(1)} & \dots & B_i^{(C_i)} \end{bmatrix} \begin{bmatrix} \theta_i^{(1)}(t) \\ \dots \\ \theta_i^{(C_i)}(t) \end{bmatrix} + e_i(t) \quad (13)$$

where $y_i(t)$ is the power demand of i th device at time t , C_i is the total number of operating modes of the device, $B_i^{(j)}$ is the device power demand at the j th operating mode and $e_i(t)$ is the intrinsic modelling error. $\theta_i^{(j)}(t)$ can be either 0 or 1.

Disaggregation algorithm as a least-square minimization problem can be represented as (14) and (15).

$$\min_{\theta_i^{(j)}(t)} \sum_{t=1}^T (y(t) - \sum_{i=1}^N \hat{y}_i(t, \theta_i))^2 \quad (14)$$

with:

$$\hat{y}_i(t, \theta_i) = y_i(t) - e_i(t) = \begin{bmatrix} B_i^{(1)} & \dots & B_i^{(C_i)} \end{bmatrix} \begin{bmatrix} \theta_i^{(1)}(t) \\ \dots \\ \theta_i^{(C_i)}(t) \end{bmatrix} \quad (15)$$

To account for change in device consumption level (non-piecewise-constant energy consumption), Rottondi et al. added a penalty to the quadratic programming model proposed by Piga et al. as (16).

$$\min_{\theta_i^{(j)}(t)} \sum_{t=1}^T (y(t) - \sum_{i=1}^N \hat{y}_i(t, \theta_i))^2 \sum_{i=1}^{i=N} \alpha_i x_i(t) \quad (16)$$

where α_i is the weight of the i th device and $x_i(t)$ is 1 if i th element changes the consumption level in interval- t . In order to account for unknown devices, Rottondi et al. added mixed integer constraints that limit the length of the activity period and maximum consumption of appliances in set N .

The algorithm was implemented in AMPL and solved with Gurubi solver. It was benchmarked against two state-of-the-art disaggregation methods namely combinatorial optimization and factorial hidden Markov model. Test datasets used was UK-DALE. Data sets with sample rates ranging from 5min to 60min were used as raw data. It was concluded that the proposed algorithm could solve load disaggregation problem for low sample rate electric signals in the presence of unknown loads.

Other Recent Relevant Works

There are a many research contributions reported recently on NILM solutions for aggregated electrical signals with low granularity. Table 2.1 summarizes some of the relevant works.

CONCLUSIONS

An elaborate literature survey was carried out in the field of non-intrusive load monitoring problem with an emphasis on disaggregation solutions for low-rate smart meter data. Salient observations are:

1. The recent advancements in the field of smart meters and internet of things (IoT) has increased the prospects of large scale deployment of non-intrusive load monitoring (NILM).
2. Though several variants of machine learning algorithms have been employed by researchers, no single method offers load disaggregation solution to all types of appliances.
3. Due to the presence of different makes of a given appliance and due to the possibility of different patterns of operation by a user, development of generic appliance models is a formidable task.
4. Since supervised methods require off-line training of classifiers, it is difficult to implement them in real-time due to the unavailability of an updated appliance signature database.
5. Owing to the consumer privacy and economic concerns, low rate aggregate energy data is gaining more popularity.
6. However identifying low power consumer appliances exhibiting similar power consumption characteristics and multistate appliances is a challenge for low rate data.
7. Since unsupervised disaggregation methods do not require a priori training, there is no requirement for sub-metering of individual appliances. They are economical and thus appears to be a good choice for real time NILM implementation.

An optimal non-intrusive load monitoring system should be able to accurately identify and disaggregate in near real times, all constituent appliances of a household using standard smart meter measurement data in the most economical way. It should identify all types of appliances regardless of their category, make, size and the manufacturer.

REFERENCES

1. "Smart meters," Energy Efficiency Services Limited, [Online]. Available: <https://www.eeslindia.org/content/raj/eesl/en/Programmes/Smart-Meters/about-smart-meters.html>. [Accessed 31 July 2020].

2. G. W. Hart, "Prototype non-intrusive appliance load monitor," MIT Energy Laboratory and Electric Power Research Institute, 1985.
3. J. R. Herrero, Á. L. Murciego, A. L. Barriuso and D. H. d. l. Iglesia, "Non Intrusive Load Monitoring (NILM): A State of the Art," in 15th International Conference, PAAMS 2017, 2017.
4. N. Batra, J. Kelly, O. Parson, H. Dutta, W. Knottenbelt, A. Rogers, A. Singh and M. Srivastava, "NILMTK: An Open Source Toolkit for Non-intrusive Load Monitoring," in fifth International Conference on Future Energy Systems (ACM e-Energy)2014, 2014.
5. H. Liu, Non-intrusive Load Monitoring: Theory, Technologies and Applications, Springer Singapore, 2019.
6. G. W. Hart, "Nonintrusive appliance load monitoring," Proceedings of the IEEE, vol. 80, no. 12, pp. 1870 - 1891, 1992.
7. L. Pereira and N. Nunes, "Performance evaluation in non-intrusive load monitoring: Datasets, metrics, and tools—A review," WIREs Data Mining and Knowledge Discovery , vol. 8, no. 6, pp. 1-17, 2018.
8. R. Bonfigli and S. Squartini, Machine Learning Approaches to Non-Intrusive Load Monitoring, Springer Nature Switzerland AG, 2019.
9. K. Suzuki, S. Inagaki, T. Suzuki, H. Nakamura and K. Ito, " Nonintrusive appliance load monitoring based on integer programming," in Proc.SICE Annual Conference-2008, 2008.
10. M. Z. A. Bhotto, S. Makonin and I. V. Bajić, "Load Disaggregation Based on Aided Linear Integer Programming," IEEE Transactions on Circuits and Systems II: Express Briefs, vol. 64, no. 7, pp. 792 - 796, 2017.
11. F. M. Wittmann, J. C. López and M. J. Rider, "Nonintrusive Load Monitoring Algorithm Using Mixed-Integer Linear Programming," IEEE Transactions on Consumer Electronics , vol. 64, no. 2, pp. 180-187, 2018.
12. M. Baranski and J. Voss, "Genetic Algorithm for Pattern Detection in NIALM Systems," in IEEE International Conference on Systems, Man and Cybernetics, 2004.
13. M. Weiss, A. Helfenstein, F. Mattern and T. Staake, "Leveraging smart meter data to recognize home appliances," in IEEE International Conference on Pervasive Computing and Communications, 2012.
14. A. Marchiori, D. Hakkarinen, Q. Han and L. Earle, " Circuit-Level Load Monitoring for Household Energy Management," IEEE Pervasive Computing , vol. 10, no. 1, pp. 40-48, 2011.
15. A. G. Ruzzelli, C. Nicolas, A. Schoofs and G. M. P. O'Hare, "Real-Time Recognition and Profiling of Appliances through a Single Electricity Sensor," in 2010 7th Annual IEEE Communications Society Conference on Sensor, Mesh and Ad Hoc Communications and Networks (SECON), 2010.
16. T. Zia, D. Bruckner and A. Zaidi, "A hidden Markov model based procedure for identifying household electric loads," in IECON 2011 - 37th Annual Conference of the IEEE Industrial Electronics Society, 2011.
17. D. Srinivasan, "Neural-network-based signature recognition for harmonic source identification," IEEE Transactions on Power Delivery, vol. 21, no. 1, pp. 398 - 405, 2006.
18. G.-y. Lin, S.-c. Lee, J. Y.-j. Hsu and W.-r. Jih, "Applying power meters for appliance recognition on the electric panel," in 2010 5th IEEE Conference on Industrial Electronics and Applications, 2010.

19. K. Kamoto, Q. Liu and X. Liu, "Unsupervised Energy Disaggregation of Home Appliances," in Cloud Computing and Security: Third International Conference, ICCCS 2017, 2017.
20. H. Goncalves, A. Ocneanu and M. Berges, "Unsupervised disaggregation of appliances using aggregated consumption data," in 1st KDD Workshop on Data Mining Applications in Sustainability (SustKDD), 2011.
21. H. Shao, M. Marwah and N. Ramakrishnan, "A Temporal Motif Mining Approach to Unsupervised Energy Disaggregation," in 27th AAAI conference on Artificial Intelligence, 2013.
22. H. Kim, M. Marwah, M. F. Arlitt and G. Lyon, "Unsupervised Disaggregation of Low Frequency Power Measurements," in Proceedings of the Eleventh SIAM International Conference on Data Mining, SDM 2011, 2011.
23. J. Z. Kolter and T. S. Jaakkola, "Approximate inference in additive factorial HMMs with application to energy disaggregation," in International Conference on Artificial Intelligence and Statistics, 2012.
24. B. Zhao, M. Ye, L. Stankovic and V. Stankovic, "Non-intrusive load disaggregation solutions for very low-rate smart meter data," Elsevier Applied Energy, vol. 268, pp. 1-16, 2020.
25. G. Zhang, G. G. Wang, H. Farhangi and A. Palizban, "Data mining of smart meters for load category based disaggregation of residential power consumption," Elsevier Sustainable Energy, Grids and Networks, vol. 10, pp. 92-103, 2017.
26. B. Zhao, L. Stankovic and V. Stankovic, "Electricity usage profile disaggregation of hourly smart meter data," in Proceedings of NILMWorkshop 2018, 2018.
27. J. Holweger, M. Dorokhova, L. Bloch, C. Ballif and N. Wyrsh, "Unsupervised algorithm for disaggregating low-sampling-rate electricity consumption of households," Elsevier Sustainable Energy, Grids and Networks, vol. 19, pp. 1-23, 2019.
28. C. Rottondi, M. Derboni, D. Piga and A. E. Rizzoli, "An optimisation-based energy disaggregation algorithm for low frequency smart meter data," Springer Energy Informatics, vol. 2, no. 1, pp. 1-11, 2019.
29. D. Piga, A. Cominola, M. Giuliani, A. Castelletti and A. E. Rizzoli, "Sparse Optimization for Automated Energy End Use Disaggregation," IEEE Transactions on Control Systems Technology, vol. 24, no. 3, pp. 1044 - 1051, 2016.
30. S. Welikala, C. Dinesh, R. I. Godaliyadda, M. P. B. Ekanayake and J. Ekanayake, "Robust Non-Intrusive Load Monitoring (NILM) with unknown loads," in IEEE International Conference on Information and Automation for Sustainability (ICIAfS), 2016.
31. S. Biansoongnern and B. Plangklang, "Nonintrusive load monitoring (NILM) using an Artificial Neural Network in embedded system with low sampling rate," in 13th International Conference on Electrical Engineering/Electronics, Computer, Telecommunications and Information Technology (ECTI-CON), 2016.
32. L. Kong, D. Yang and Y. Luo, "Non-Intrusive Load Monitoring and Identification Based on Maximum Likelihood Method," in IEEE International Conference on Energy Internet (ICEI), 2017.
33. B. Huang, M. Knox, K. Bradbury, L. M. Collins and R. G. Newell, "Non-intrusive load monitoring system performance over a range of low frequency sampling rates," in IEEE 6th International Conference on Renewable Energy Research and Applications (ICRERA), 2017.

34. S. Lynch, "On the relationship between sampling rate and Hidden Markov Models Accuracy in Non-Intrusive Load Monitoring," in Irish Conference on Artificial Intelligence and Cognitive Science, 2017.
35. Q. Yuan, H. Wang, B. Wu and Y. Song, "A Fusion Load Disaggregation Method Based on Clustering Algorithm and Support Vector Regression Optimization for Low Sampling Data," Future Internet, MDPI, vol. 11, pp. 1-23, 2019.
36. H. Wang, W. Yang, T. Chen and Q. Yang, "An Optimal Load Disaggregation Method Based on Power Consumption Pattern for Low Sampling Data," Sustainability, MDPI, vol. 11, pp. 1-16, 2019.
37. A. Miyasawa, Y. Fujimoto and Y. Hayashi, "Energy disaggregation based on smart metering data via semi-binary nonnegative matrix factorization," Elsevier, Energy and Buildings, vol. 183, pp. 547-558, 2019.
38. M. Liang, Y. Meng, N. Lu, D. Lubkeman and A. Kling, "HVAC load Disaggregation using Low-resolution Smart Meter Data," in IEEE Power & Energy Society Innovative Smart Grid Technologies Conference (ISGT), 2019.
39. S. Welikala, N. Thelasingha, M. Akram, P. B. Ekanayake, R. I. Godaliyadda and J. B. Ekanayake, "Implementation of a robust real-time non-intrusive load monitoring solution," Elsevier Applied Energy, vol. 238, pp. 1519-1529, 2019.
40. P. A. Schirmer, "Improving Energy Disaggregation Performance Using Appliance-Driven Sampling Rates," in 27th European Signal Processing Conference (EUSIPCO), 2019.
41. X. Shi, H. Ming, S. Shakkottai, L. Xie and J. Yao, "Nonintrusive load monitoring in residential households with low-resolution data," Elsevier Applied Energy, vol. 252, pp. 1-10, 2019.
42. N. Batra, A. Singh and K. Whitehouse, "Neighbourhood NILM: A Big-data Approach to Household Energy Disaggregation," arXiv preprint arXiv:1511.02900, 2015.
43. A. Zoha, Q. H. Abbasi and M. A. Imran, "A Non-Event Based Approach for Non-Intrusive Load Monitoring," in Wireless Automation as an Enabler for the Next Industrial Revolution, 2020 John Wiley & Sons Ltd., 2019, pp. 173-191.
- 44.

SYSTEM OF IMPROVING PSYCHOLOGICAL PREPARATION OF STUDENTS FOR PROFESSIONAL ACTIVITY

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ABSTRACT

The article is aimed at studying the system of improving the psychological readiness of students for professional activities. It also analyzes a number of scientific sources on general methodological and theoretical issues related to career choice, career guidance, understanding and definition of professional identity. The research focuses on the specific characteristics of individuals with motives for action in three areas. Self-direction.

Keywords--students, professional activity, profession, professional formation of students "self-orientation", "people-oriented", "activity-oriented", personal viability, professional viability.

I. INTRODUCTION

The attitude of university students to the profession, professional development and professional development is of great social and economic importance, which directly determines its scientific, spiritual, material potential, domestic and foreign policy. Also, this problem is one of the problems that need to be studied in a comprehensive and consistent manner, and based on this, appropriate measures and long-term plans should be developed. Because career choice, career guidance, professional diagnosis, the formation of young people as professionals, and professional development are always in the focus of government, but it is extremely important for an individual to think about his or her own future.

As we explore the question of interdependence in the professional formation of the individual, we must recognize that research has entered its critical phase today. This is because there are many studies that examine career choice, career guidance, career development, career management, and other issues of career development, and so on.

The analysis of scientific sources shows that a number of researches have been carried out on general methodological and theoretical problems related to career choice, career guidance, understanding and definition of professional identity, including: L.A. Aza, G.M. Belokrilova, A.E. Golomshtok, V.I. Zhukovskaya, E.A. Klimov, M.X. Titma, P.A. Shavir, M.G. Davletshin, N.Sh. Shodiev, B.R. Qodirov, E. G'. Gaziev et al [4].

A number of studies are devoted to the study of career choice, professional suitability and professional self-awareness, the psychological requirements of professional activity and the psychophysiological basis of individual activity, the formation of professional interests. In these directions M.H. Titma, E.A. Klimov, V.G. Maksimov, A.P. Chernyavchikaya, E.A. Golomshtok, K.M. An example is the research work of Gurievich, N.D. Levitov and others [1]. The problems of professional psychology have also been seriously studied by Uzbek scientists. In our country, teachers and

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psychologists have conducted a number of studies in this area, which include: vocational guidance of students (MG Davletshin, diagnostics of professional activity), (BR Kadyrov, KB Kadyrov, occupational psychology and

its ethnopsychological aspects) , EG Goziev, Development of professional interests in young people trained in technical professions [3]; formation of professional characteristics in students (A. Jabbarov) [4]; on the conditions of vocational guidance of students (P.T. Magzumov, vocational training of students (E.T. Choriev, the organization of vocational guidance of students (N. Shodiev) and others [1].

On the study of the philosophical and psychological nature of the profession, K.B. Kadyrov conducted scientific research. In his research, he has not limited himself to analyzing the issues of professional diagnostics, but has been able to briefly interpret the psychological nature of the professional works of our generation and ancestors. He conducted a phase of professional counseling, i.e. experiments in occupational diagnostics, and in his research he covered the process of professional activity in general psychological, differential psychological and psychodiagnostic [2].

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Having studied different stages of professional activity, AM Jabborov studied the formation of professionally important personal qualities of future cotton growers in student production brigades [4], RZ Gaynutdinov studied the professional development of Uzbek school teachers, the development of professional interests in young people trained in technical professions (E.N. Sattorov); B.N. Sirliiev and Sh.B. Saparov studied the professional formation of teachers and masters of vocational schools [1].

B.N. Sirliiev's research is aimed at studying the psychological aspects of professional development of masters of secondary special vocational schools, in which a psychological analysis of the relationship between the personal and professional characteristics of masters and their stages of professional development [4].

While focusing on the professional development of the individual, the author describes it as a dynamic and multi-level process. According to him, the process of maturation consists of four stages, the transition from one to the other takes place on the basis of the previous ones. The first stage is associated with the emergence of a professional intention, which arises and is formed under the influence of the initial professional orientation and general development in various spheres of labor. The psychological dimension of this stage is the choice of profession and specialty. The second is vocational education and training, that is, purposeful preparation for the chosen professional activity. It includes professional self-determination as a psychological criterion. This reflects the institution of professional development. The third stage is the introduction of a profession characterized by active acquisition of the profession and finding its place in the system of the production team.

The fourth stage is the full or partial manifestation of the individual in independent labor. The psychological indicator of this stage is the opportunity to master professional skills.

In research in Uzbek psychology, a problem closer to the one we are studying can be observed in the research of DN Arzikulov. The researcher touched upon the problem of professional development of future agronomists studying at the university. His research focuses on the psychological analysis of the development of personal and professional qualities in professional development, but the study does not reveal whether students

really fit into their chosen profession, what are the main barriers to their professional formation and factors influencing the formation of a specialist. Given the above, we will also focus on these issues in our research [1].

From the analysis of professional identification research, it can be concluded that each stage of professional activity should be viewed as a system. T.M.Buyakas, N.D.Levitov, O.N.Rodina in their research pay special attention to professional counseling, which is one of the stages of professional development, evaluate it as a guide

in the process of adaptation to a particular professional activity and explain the effectiveness of activities in relation to individual abilities [4].

In our research, we focused on identifying students' perceptions of career formation today, the factors that lead to career choice and what influences career choice, the levels of career motivations, personal and professional goals, interests, and professional decisions. However, so far scientific research has revealed that there are various reasons for choosing a profession. When analyzing adolescents' perceptions of professional identity, it was found that there was a shallowness in their perceptions of occupations. In addition, we need to keep in mind the factors of influence of the educational environment and others between the process of choosing a particular profession and the understanding of professional identity. The dialectical connection in these interaction processes alone is an indication of the complexity of this issue. For example, there are a number of stages in the organization of a single professional counseling:

- a) At the stage of vocational education, a person receives information about the organization of labor, recruitment requirements, occupation of various professions, stages of their training and duration of training, wages and prospects of the profession.
- b) at the diagnostic stage, the suitability of the person's interests, abilities, abilities and goals in relation to his chosen profession is studied;
- c) the student or person who chooses a profession at the formative stage is guided, deviations in career choice are prevented and corrections are made;
- (g) To determine the appropriateness of medical health to the profession and, at the psychological level, the appropriateness of personal qualities to the profession of their choice. P.A. According to Shavir, the definition of a person's professional identity requires the ability to meet future professional requirements, self-assessment of professional suitability, increase the level of willpower, love of work and life experience.

The fact that the study of the problem of the profession has a wide range of its own research subject can be seen in the research work carried out to date. It is noteworthy that these studies have been conducted for several years and the scale of the results obtained from them. Comparing them with the results of today's research will enrich our achievements in this area. However, the issue of the impact of students' professional perceptions on professional formation and adaptation to professional activity is one of the most pressing issues today. There are also a number of studies that focus on the psychological aspects of a person's professional development [20]. There are various approaches, scientific conclusions and special methodologies in the study of professional

activity as a subject of psychological and pedagogical research.

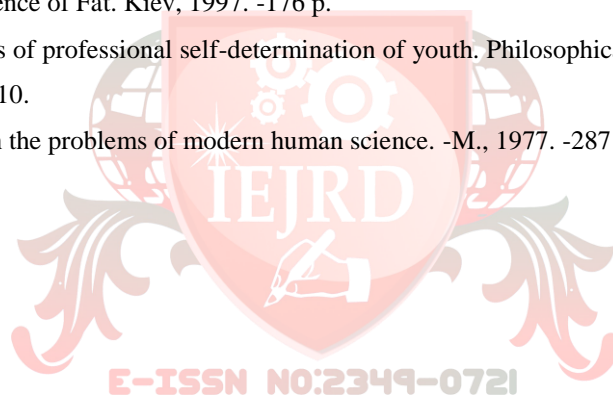
RECOMMENDATIONS

To prevent shortcomings and deficiencies in the process of personal and professional formation of students in higher education institutions, to organize courses on professional training in psychological service centers and to

ensure that leading specialists work in them. Introduction of a perfect "Professional Perspective Map of Personality" of professional formation, which takes into account any changes in professional activity, the purpose of which is of general importance, serves to the corre

REFERENCES

1. Arzikulov D.N. Psychological peculiarities of professional maturity: Avtoref.psix.fan.nomz.dis.T.2002.- 137.
2. Asamova RZ Motivation to choose a profession and its dynamics // Diss. psychol. fanl.nomzod.- Toshkent, 2002.-138 p.
3. Gaziev EG Psychological foundations of the development of self-learning by schoolchildren and students. Abstract. Dis .. Doct. ps. sciences. M.: 1992.- 38 p.
4. Zhabbarov A.M. Psychological foundations of the formation of professionally significant personality traits of the future cotton grower in student production teams: Abstract. dis ... cand. psychol. sciences. – Kiev, 1999.-27 p.
5. Abramova G.S. Practical psychology. Textbook for university students. - Ed., 6th., Revised. and additional ..- M.: Academic Project, 2001.- 480 p.
6. Adler A. The Science of Fat. Kiev, 1997. -176 p.
7. Aza L.A. Features of professional self-determination of youth. Philosophical and sociological thought.- 1989.-No. 6.-p 3-10.
8. Ananyev B.G. On the problems of modern human science. -M., 1977. -287 p.



ANTIPIRIN C AND ITS COMPLEXES WITH LANTHANUM

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ANNOTATION

This scientific article discusses the results of a study of the structure of antipyrine C and its lanthanum complexes. On the basis of the calculations, comparative calculated values of the maximum absorption range of the most probable structures with the experimental electronic absorption spectra of Gauss are presented, and preliminary observations of the forms of complexes under the influence of the pH of the medium are described.

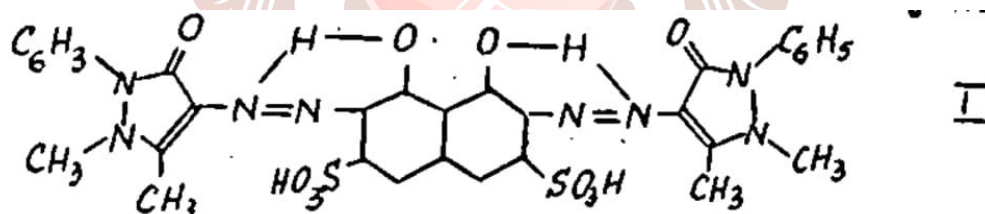
Key words: *antipyrine C, absorption band, quinone hydrazone form, reagent azo form, sandwich structure, spectrum shift, quinone hydrazone tautomerism.*

INTRODUCTION

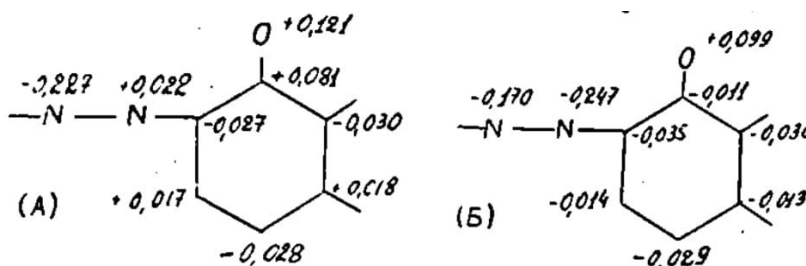
Ionic states in solutions of 2,7-bis (1-phenyl-2,3-dimethyl-4-azopyrazolone-5) -1,8-dioxynaphthalene-3,6-disulfonic acid (antipyrine C) and the mechanism of its complexation with lanthanum. The choice of the most probable structures was carried out by comparing the calculated values of the absorption band maxima of possible structures with the experimental electronic absorption spectra, decomposed into individual Gaussian components, and comparing other quantum-chemical characteristics of these structures.

RESULTS AND THEIR DISCUSSION

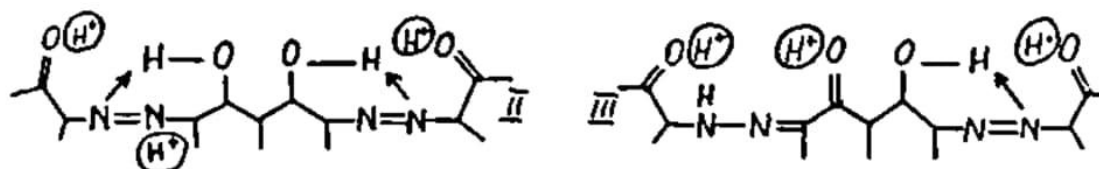
Our studies show that in media with pH = 5 - 7, the reagent is in azo form I. The quinone hydrazone form is not detected under these conditions:



The features of the charge distribution in the azo form, apparently caused by strong electron-donating effects of antipyrine nuclei, are large negative charges on the nitrogen atoms of the azo groups closest to the naphthalene nucleus and the presence of negative charges on all carbon atoms of the naphthalene nucleus. This distinguishes antipyrine C from mono- and bisazo derivatives obtained by azo coupling of chromotropic acid with amino derivatives of benzene, where large negative charges are carried by the nitrogen atoms of the azo groups closest to the benzene nuclei, and the charges on the carbon atoms of the naphthalene ring alternate. This is illustrated by the following fragments of the molecular diagrams of benzene C (A) and antipyrine C (B):

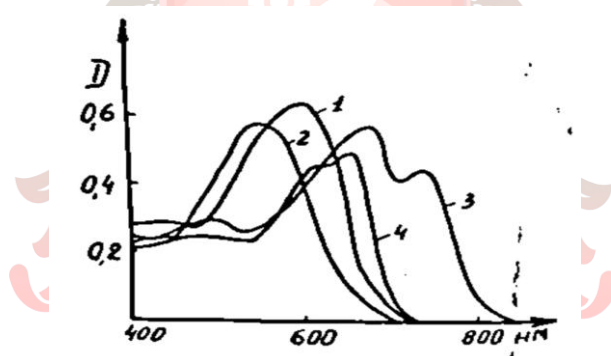


At pH = 1 - 2, a slight bathochromic shift of the spectrum is observed, which is apparently associated with the protonization of the carbonyl oxygen atom of the azo form antipyrine nucleus. With a further increase in acidity (50% H₂SO₄ solution), the absorption spectrum shifts hypsochromically, which is probably caused by the appearance of the reagent azo form protonated at both carbonyl groups. The absorption spectrum in concentrated H₂SO₄ is shifted bathochromically relative to the spectrum of the reagent at pH = 5 - 7, which may be associated with the formation of structures II and III:



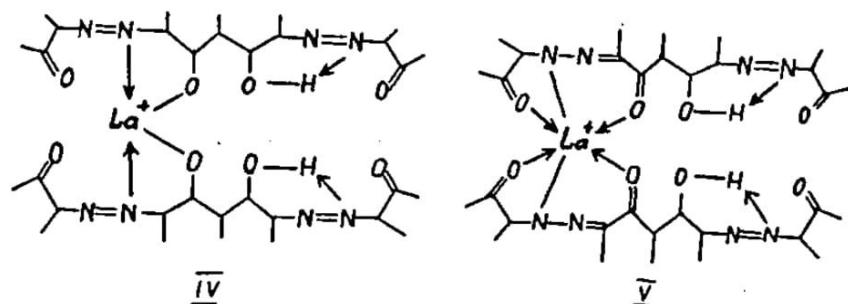
At pH 11-13, one of the hydroxy groups of the naphthalene nucleus dissociates, which causes a hypsochromic shift in the spectrum. In a 20 - 40% alkali solution, the second oxy group dissociates, which leads to a bathochromic shift of the absorption spectrum of the reagent.

Depending on the condition, the complexation of lanthanum with antipyrine C is characterized by two types of spectral curves (Fig. 1). At pH = 6.5, a complex of the composition Me: R = 1: 2 is formed with peaks in the spectrum at 610 and 650 nm. The absorption spectrum at pH = 2.5 is characterized by an additional maximum at 735 nm. The composition of the complex under these conditions is Me: R = 1: 4.



Pic. 1. Absorption spectra of antipyrine C (1-pH = 2.5; 2-pH = 6.5) and complexes with lanthanum (3-pH = 2.5; 4-pH = 6.5)

First of all, we note that, as follows from the above fragments of the molecular diagrams, as well as from the calculation data for the positions λ_{\max} , the coordination of the metal to the nitrogen atom of the azo group closest to the naphthalene poison turns out to be more probable. The best agreement between the calculated and experimental data for pH = 6.5 is observed for the sandwich structure IV.



Conclusion: an additional long-wavelength maximum in the absorption spectrum of the complex at pH = 2.5 indicates the probable formation under these conditions of complex V with the quinone hydrazone tautomer of antipyrine C, which is in equilibrium with form IV. The proposed scheme explains the spectrum of the complex at pH = 2.5, but does not explain the composition Me: R = 1: 4. Since the spectrum of the complex at pH = 2.5 also exhibits absorption in the range 550 - 600 nm, where, according to calculations, it also absorbs the azo form of the reagent, it can be assumed that this composition is associated with the phenomena of association, a possible cause of which may be the above negative charge of naphthalene. cycle of antipyrine C.

LITERATURE

1. Н.С.Рукк, Р.С. Шамсиев. Спектральное и квантово-химическое исследование антипириновых производных некоторых комплексных соединений РЗЭ. Вестник МИТХТ, 2012, т. 7, № 6.
2. Кравченко В.В., Зайцева М.Г., Рукк Н.С., Степин Б.Д. Колебательные спектры антипириновых производных иодидов лантаноидов // Коорд. химия. 1988. Т. 14. № 5.
3. Атоев Э.Х. Гетероциклические оксиазосоединения как аналитические реагенты. "Universum" научный журнал. Москва. 2021, Вып 3 (81) Часть 2.
4. Медведев Ю.Н., Зайцев Б.Е., Кузнецов М.И. и др. Комплексообразование безводных нитратов лантанидов антипирином в диоксановых растворителях. // Ж. неорг. химии. 1999. Т. 38.
5. Акимов В.К., Бусев А.И. Применение антипирина и некоторых его производных в аналитической химии. // Ж. Неорг. Химии 1998. Т. 26.



**RESEARCH PAPER ON CONCEPTUAL STUDY OF ONLINE SUPPLY CHAIN
MANAGEMENT FOR NATION BUILDING**¹Dr. Anil T. Gaikwad, ²Dr. R.D. Jadhav

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ABSTRACT

Online Supply chain Management is a supply chain management component that is used to meet customer demands through the planning, control and implementation of the effective movement and storage of related information, goods and services from origin to destination. It is also themed as Logistics management which helps companies reduce expenses and enhance customer service delivering goods to the destination. The logistic is art and science which has to be performed in best way. We have to manage the various functions of supply chain management for building the nation strong financially.

By adhering to customer needs and industry standards, online supply chain or logistics management facilitates process strategy, planning and implementation . The use of computers, Internet, ecommerce websites is rapidly used in this sector in present days.

Logistics is generally the detailed organization and implementation of a complex operation. In a general business sense, logistics is the management of the flow of things between the point of origin and the point of consumption to meet requirements of customers or corporations. The resources managed in logistics may include tangible goods such as materials, equipment, and supplies, as well as food and other consumable items. The logistics of physical items usually involves the integration of information flow, materials handling, production, packaging, inventory, transportation, warehousing, and often security.

Keywords—Online technology, Logistic , Supply Chain , Business process , Packaging, Material, Handling, Inventory management.

INTRODUCTION

The online technologies are fostering lot of businesses in this century. The use of computers and communication is making the lot of difference in process of performing the business. The logistic in present age most required and necessity for the customers which are having possibility to move from one place to other and also world is coming closer and now it is moving towards boarder less in terms of transport f good as and material through out the globe . The technique to perform these activities is now requiring the serious though and audit has become now part my management function

In online supply the orders are taken through web portal or through app on the smart phone. The various parties are involved in this process from the customer, technology, travel companies suppliers and at the end producers. The main aim of every one is to reduce the supply time to the customer. The logistics management, unwise decisions create multiple issues. For example, deliveries that fail or are delayed lead to buyer dissatisfaction. Damage of goods due to careless transportation is another potential issue. Poor logistics planning gradually increases expenses, and issues may arise from the implementation of ineffective logistics software. Most of these problems occur due to improper decisions related to outsourcing, such as selecting the wrong vendor or carrying out delivery tasks without sufficient resources.

ONLINE SUPPLY CHAIN MANAGEMENT FUNCTIONS IN BRIEF

The Logistic involves certain basic functions which are to be performed effectively which are order processing , Costing , Transportation , warehousing and Inventory management through the mode of online using mainly developed apps for this purpose.

As multi-leveled equations, graphics, and tables are not prescribed, although the various table text styles are provided. The formatter will need to create these components, incorporating the applicable criteria that follow.

BASIC ELEMENTS OF ONLINE SUPPLY CHAIN MANAGEMENT

Following are the basic Logistics management elements, including:

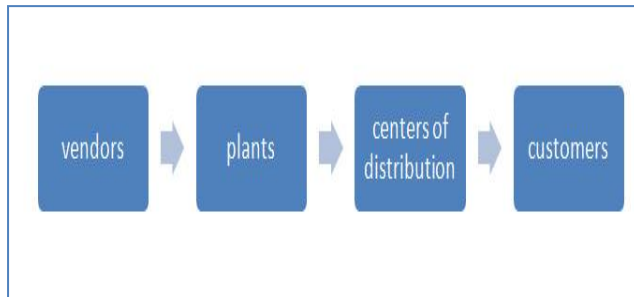
- Selecting appropriate vendors with the ability to provide transportation facilities
- Choosing the most effective routes for transportation
- Discovering the most competent delivery method
- Using software and IT resources to proficiently handle related processes.
- Using financial portal for payment.
- Using security software.
- Agencies of government for payment of taxes etc.

To resolve these issues, organizations should implement best logistic management practices. Companies should focus on collaboration rather than competition. Good collaboration among transportation providers, buyers and vendors helps reduce expenses. An efficient and safe transportation provider is also vital to business success.

ONLINE SUPPLY CHAIN MANAGEMENT REQUIREMENTS.

Logistic is the process of planning and executing the efficient transportation and storage of goods .

- Right product
- Right quantity
- Right condition
- Right place
- Right customer
- Right time
- Right online technology

BASIC SUPPLY CHAIN MANAGEMENT PROCESS :-Source:-<https://live.staticflickr.com/2338716img>Source:-www.wikipedia/images/online/logistic.jpg

The logistic process involves vendor at one location with connection to plants , centers for distribution and at the other end is customer . The flow of information is important to reduce the cycle time and reach the destination at the minimum time. The other factors are less expensive mode of transport, safety in transport of material and goods, cash flow improvement, improve customer service and better service to the customer in minimum time.

MAIN FUNCTIONS OF SUPPLY CHAIN MANAGEMENT OR LOGISTIC MANAGEMENT

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

- Procurement logistics
- Distribution logistics
- After-sales logistics
- Disposal logistics
- Reverse logistics
- Green logistics
- Global logistics
- Domestic logistics
- Concierge Service
- Asset Control Logistics
- POS Material Logistics
- Emergency Logistics
- Production Logistics
- Construction Logistics
- Capital Project Logistics
- Digital Logistics

PROBLEMS IN SUPPLY CHAIN MANAGEMENT

Following are the main issues in the Online Supply Chain management System

Infrastructure problem

Use of Internet

Awareness of Stakeholders

Cost of Usage

Expert Support

Law of Business on Internet

IT act 200

CONCLUSION

Supply chain Management is most important in 21st Century for the transport of goods and material inside the country and abroad as well. It is the systematic planning and science to perform all the activities of logistics management in most professional way. The number of companies are now taking the task of logistic private and government as well. The tools and techniques will play an important role making these companies profitable. It will also depend on the experts available with the company. This paper will be decent contribution in creating the awareness and make the activities in better way by the managers and stakeholders of the logistics companies. The use of high end software like ERP and smart phones is going to increase in the near future and it will be the basic requirement of the society of this century. The nation cannot be called developed unless and until we are very strong in business processes.

REFERENCES

1. Gaikwad Anil 'Innovation management a business development approach' Lambert Academic publication - 2019 ppt 53-59
2. Cloutier, Peter J.; Frank, Brian K. (July–August 2009). "The Joint Logistics Analysis Tool". 'Army Logi.pp14.
3. Lambert D., Stock J., Ellram L., *Fundamentals of Logistics*, McGraw-Hill 1998 pp.8-10.
4. McGinnis M. A., *Military Logistics: Insights for Business Logistics*, International Journal of
5. *Physical Distribution & Logistics Management* Vol 22, 1992.pp 23-24.
6. Ronald H. Ballou, Samir K. Srivastava, *Business Logistics: Supply Chain Management*,
7. Pearson Edu, 2007.pp9
8. Sinha P. K 'Fundamental of computers 2019 products 20-22.
9. Waters D., *Logistics: An Introduction to Supply Chain Management*, Palgrave Macmillan
10. Website References – https://www.logisticsmgt.com/wp_content

METHODOLOGY OF DEVELOPMENT OF DIDACTIC EDUCATION WITH THE USE OF MULTIMEDIA TECHNOLOGIES

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Named after Islam Karimov Tashkent State Technical University Teacher of the Foreign Languages Department

ABSTRACT

In the preparation of educational multimedia presentations it is necessary to consider, on the one hand, General didactic principles of the educational courses, requirements, dictated by the psychological features of perception of information from the screen and on a printed basis (because any text can be displayed with printer on paper), ergonomic requirements, and to maximize the opportunities that provide us with software tools telecommunications networks and modern information technologies. Naturally, it is necessary to start from didactic and cognitive goals and objectives, because the means of information technology are the means of implementing didactic tasks.

Keywords: *prepositions, auxiliary words, interpretation, translatology, theory of translation, case endings, methods of analysis*

In other words, the effectiveness of multimedia presentations depends on the quality of the materials used (training courses) and the skills of teachers involved in this process. Therefore, pedagogical, informative organization of multimedia presentations (both at the design stage of the presentation and in the process of its use) is a priority. Hence the importance of conceptual pedagogical provisions, which are supposed to build a modern lesson using multimedia presentations. When creating multimedia presentations, consider the following requirements:

Motivation. Motivation is an essential component of learning that must be maintained throughout the lesson process. Of great importance is a clearly defined goal that is set for students. Motivation quickly decreases if the level of tasks does not correspond to the level of training of the student.

Setting a learning goal. The student from the beginning of work at the computer should know what is required of him. Learning objectives should be clearly stated during the lesson.

Creating prerequisites for the perception of educational material. To create prerequisites for the perception of educational material can be useful auxiliary materials (guidance for the student), included in the textbook or prepared by the teacher.

Submission of educational material. The strategy of presenting the material is determined depending on the educational tasks to be solved. An important problem is the design of the frames supplied to the display screen. It is necessary to use well-known principles of readability.

Assessment. While working with the computer, students should know how they cope with the educational material. The most important is the organization of communication "student-teacher-student". For these purposes, it is recommended to organize the work of students in projects or "learning in cooperation" discussions.

When creating a multimedia presentation, it is necessary to take into account not only the relevant principles of classical didactics, but also the specific principles of using computer multimedia presentations.

The study of the classics showed that teachers - developers of multimedia presentations will be useful. They remain extremely relevant in our time with the most modern educational technologies. Here are some of them:

- allocate each material at a certain step and a small finished parts;
- specify at each stage of the individual parts of the subsequent material and, without allowing significant breaks, bring from it some data to excite the curiosity of the student, not satisfying it, however, in full;
- distribute and arrange the material in such a way that, wherever possible, the next step in the study of the new again repeated the previous.

It is necessary that the material you captured. The use of well-known authoritative sources, brands and concepts could make people treat it with great interest. The use of a variety of graphics, animation and simulation should enhance the attractiveness of interactive courses

The use of multimedia technologies for the creation of electronic materials dictates its own laws and imposes certain requirements on the approaches and methods of development.

Multimedia educational presentations are designed to help the teacher and allow you to conveniently and clearly present the material. Applying even the simplest graphical tools is extremely effective.

Masterfully made presentation can attract the attention of students and awaken interest in learning. However, you should not get carried away and abuse the external side of the presentation associated with special effects. If you overdo it, you will reduce the effectiveness of the presentation as a whole. It is necessary to find such a balance between the material and the accompanying effects that your students literally "sat on the edge of the chair." This rule is true for all multimedia presentations in General, but especially for training presentations.

REFERENCES

1. Barkhudarov L.S. (1975). Yazik i perevod (Language and translation). Moscow: Visshaya shkola. 147. [2]
2. Komissarov V.N. (1973). Word translation. Moscow: Prosvesheniye. 145.
3. Ostin J. (2014). Andisha va g'urur (Pride and prejudice). Tashkent: Yangi asr avlodi. 401.
4. Vlahov S., Florin S. (1980). Neperevodimoye v perevode (Untranslatable words in translation). Moscow: Nauka. 130.

PRELIMINARY RESULTS OF BIOCLIMATIC MODELING OF *PHLOMOIDES OREOPHILA* (LAMIACEAE) DISTRIBUTION (MAXENT MODEL)

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ABSTRACT

In recent years, population growth in society has had a significant impact on plant populations in the region, along with increased demand for natural landscapes and their irregular use, as well as soil degradation and fragmentation of natural areas where plants are distributed. Today, one of the main tasks of biogeography is to reveal the laws of territorial distribution of biological taxa (Mordkovich, 2005).

Keywords: *Eurasian mountain, Central Tien-Shan, subalpine.*

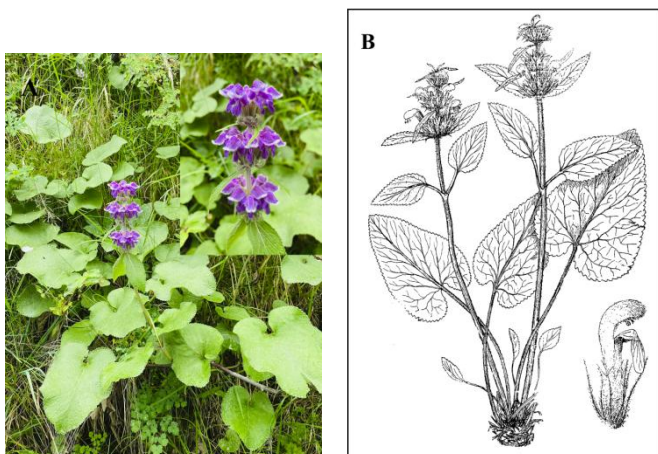
INTRODUCTION

In the last decade, various methods of modeling the distribution of species (MaxEnt, BioClim, Maximum entropy, etc.) have been actively used in different parts of the world (Zimmerman, et al., 2010). Maxent is an integrated Java application for species modeling (SDM) that deals with environmental variables such as precipitation and temperature for the surrounding research area (Phillips et al., 2006; Phillips and Dudik, 2008). It is widely used because of its high results in comparing species distribution modeling methods (Elith et al., 2006). These modeling methods are performed directly by 19 bioclimate variables (Bio1-Bio19). They are a spatially interrogated, data set prepared for global land areas using data from 9,000 to 60,000,000 weather scenarios collected between 1970 and 2000 (Fick and Hijmans, 2017).

Due to the fact that *Phlomoides oreophila* (Kar. & Kir.) Adylov, Kamelin & Makhm. is more common than other species in the implementation of bioclimatic modeling, it is the object of study selected to study the distribution of the species and its response to climate change. (Figura 1).

Phlomoides oreophila (Lamiaceae) is a Eurasian mountain species, the area of which passes through mountain systems: from Mountain Altai, through the mountains of Southeastern Kazakhstan (Tarbagatai, Dzhungarsky Alatau), Western and Central Tien-Shan to the Pamir-Alai (Gissara-Alai). *Phlomoides oreophila* grows in forest-steppe, forest belts, up to subalpine. Its characteristic habitats are rocky slopes; it prefers carbonate rocks (Komarevtseva and Guseva, 2020).

Figure 1. Photo of the species *Phlomoides oreophila* (A) in nature (author R.K. Gulomov, Sh.Abdullaev), (B) illustration.



This species is distributed in the 1800-3300 m altitude of the Chatkal, Fergana, Alay and Turkestan ridges of the Fergana Valley (Central Asia). Mountain taiga, Mountain mesophilic grasslands, Juniper forests, Shiblyak, Tall grassland, Iran-Turanian phryganoid vegetation, Tallgrass mountain semisavanna Occurs in florocenotypes such as mountain taiga, mountain mesophilic meadows, spruce forests, Shivalik, high pastures, Iran-Turan frigatebirds plants, mountain grassland. (R. Gulomov's reports).

To date, no targeted research has been conducted on the impact of bioclimatic factors on the species (R. Gulomov, A. Rakhmatov are conducting targeted research for 2020-2022 in order to conduct a comprehensive study of the series in the Fergana Valley). This study is the first attempt to study the spatial distribution of the species *Phlomoides oreophila*.

The aim of the study is to provide theoretical data for predicting future distribution areas based on a deeper understanding of the distribution characteristics and ecological adaptation of the *Phlomoides oreophila* species and the study of the positive and negative effects of bioclimatic factors on their conservation. The results of this study serve in a sense in knowing the distribution and natural resources of the species.

MATERIALS AND METHODS

Herbarium addresses stored in the funds (TASH, FRU), the results obtained from the growth areas identified in the targeted field research in the Fergana Valley in 2020-2021 and the Global Biodiversity Information Facility (GBIF, <https://www.gbif.org/>) were used to determine the location of the species. The data in this database are enriched on the basis of samples stored in various funds (LE, MW, BRNU, CSBG (NS), PE, P, W, NY). The location of the species in nature was determined using a GPS navigator, and the locations in the herbarium samples were determined using the Google Earth application. A total of 287 coordinate addresses were identified (Table 1), duplicate coordinates were excluded (165 available records were used for training, 55 for testing. The media layers used were all continuous). Maxent software (version 3.4.4) S.J. Phillips et al., (2006). To assess the predictive significance of the model, the coordinates were randomly divided into training (75%) and test (25%). Weather data was downloaded from the WorldClim database (<http://www.worldclim.org/>) (2.5 min, spatial resolution ~ 4.64 km). They all include 19 bioclimate variables.

RESULTS

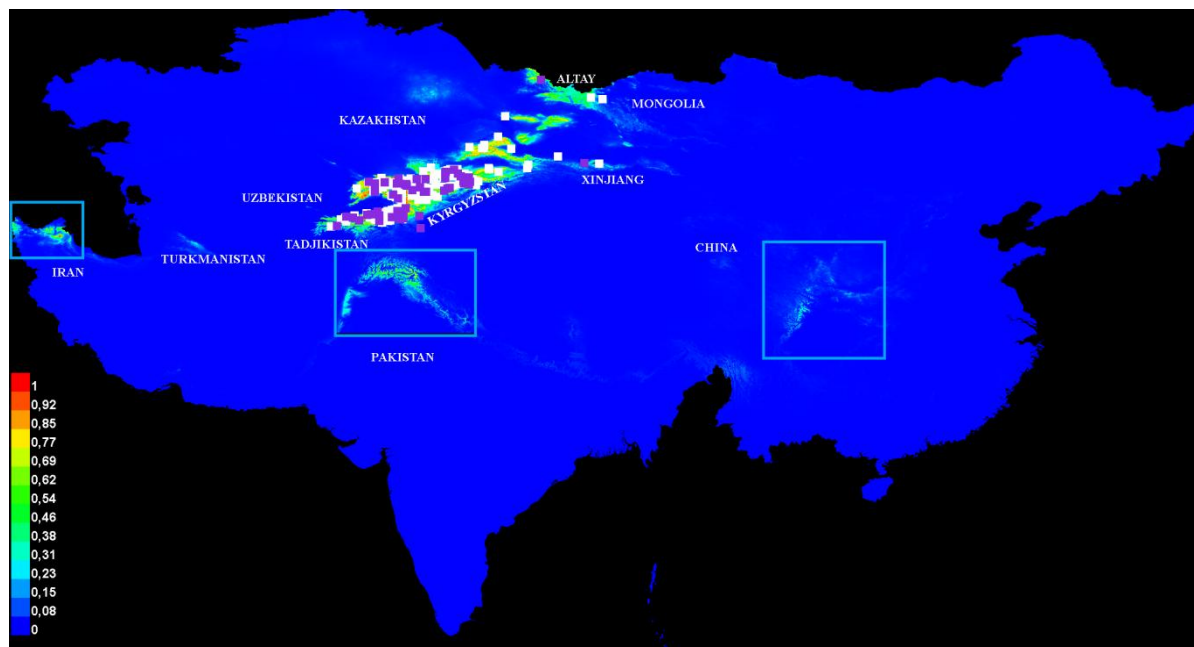
The detected coordinates were transferred to the ssv file, the algorithm was performed using 100 iterations (17 seconds) in 500 interactions with different random partitions (Bootstrap). Preliminary results were analyzed

Table 1. Number of herbarium specimens and sources from which they were obtained.

№	Ridge	Administrative territories	Number of coordinates	Sources of information
1	Tien-Shan, Tarbagatai, Dzhungarsky Alatau	Uzbekistan, Kyrgyzstan, Kazakhstan	148	TASH
2	Western and Central Tien-Shan,	Kyrgyzstan	35	FRU
3	Western and Central Tien-Shan, Pamir-Alai, Tarbagatai, Dzhungarsky Alatau	Uzbekistan, Kyrgyzstan, Kazakhstan, Xinjiang, Altay, Tadjikistan(?)	93	GBIF (LE, MW, BRNU, CSBG (NS), PE, P, W, NY)
4	Tien-Shan, Tarbagatai, Dzhungarsky Alatau	Kyrgyzstan, Kazakhstan	11	https://www.plantarium.ru

Certain criteria are important in conducting analyzes using each method. In particular, during the study, the growth rate of the results of species modeling is set from 0 to 1. In the map showing the distribution of the species, the upper range of the species is classified as "Red", and the rare areas are classified as "Yellow".

Figure 2. Species distribution range ((b) current, (c) future(addresses in the box).



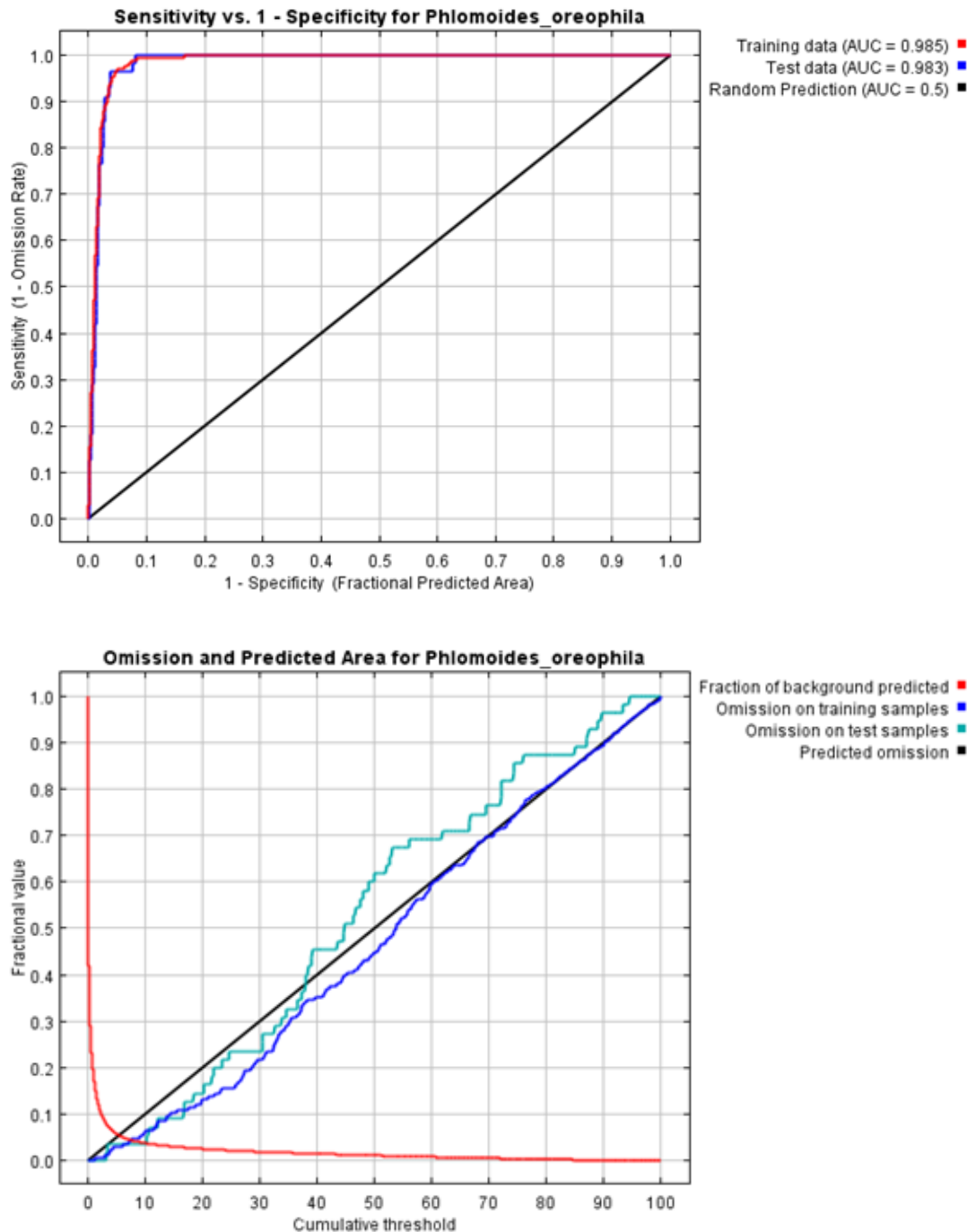
Areas with low probability of spread and almost no probability of occurrence are depicted in black and dark blue. The rest of the colors have an average rating (Figure 2).

There are 2 types of errors in modeling: omissions - the absence of quality and the presence of a forecast contribution, and commission - the absence as a contribution to the prediction of availability. In this case, the graph (Diagram 1) shows the contribution of the background points on the lower variable cumulative boundary included in the modeled distribution region by the red curve (percentage of the predicted background). The blue line is the residue in the study samples, which describes the performance of the model and shows the contribution of the existing point that extends beyond the boundary of the region, from the bottom to the top of the boundary value, limiting the prediction of the available. The blue line is to skip the taste samples. The black line is the predicted line (Mavlonov et al., 2021).

The area under the curve formed by the distribution zone (Maxent) of the genus *Phlomooides oreophila* (AUC) consists of 3 lines. Red line (Traning data) - Limits the AUC, and the closer this line is to the upper left corner, the larger the area under the curve, and the better the model predicts the availability points. Blue curve (Test data) - means that it is well described by the model under study. Black Random (Random Prediction) - delimits the area.

The AUC in the final model was 0.985 for the training set and 0.983 for the test set. This situation is interpreted as a perfect model. It also means that the spatial distribution of the species is well explained by the factors applied and does not require additional information. The AUC of the test was 0.983, the standard deviation was 0.002 (calculated as in DeLong, DeLong and Clark-Pearson 1988, Equation 2).

Diagram 1. Feasibility of a species prediction model.



CONCLUSION

Research and analysis are underway to better understand the ecological adaptation of the *Phlomoides oreophila* species mentioned in the research task and to study the positive and negative effects of bioclimatic factors on the protection of natural resources.

REFERENCES

1. Mordkovich V.G. 2005. Osnovy biogeografii. M.: KMK. 236 p.
2. Zimmermann N.E., Edwards T.C., Graham C.H., Pearman P.B. Svenning J.C. 2010. New trends in species distribution modelling // Ecography. Vol.33. No.6. P.985–989.

3. Phillips, S. J., Anderson, R. P., & Schapire, R. E. (2006). Maximum entropy modeling of species geographic distributions. *Ecological Modelling*, 190 , 231–259. <https://doi.org/10.1016/j.ecolmodel.2005.03.026>
4. Phillips, S.J. and Dudík, M., Modeling of species distributions with Maxent: new extensions and a comprehensive evaluation, *Ecography*, 2008, vol. 31, no. 2, pp. 161–175.
5. Elith, J. et al. 2006. Novel methods improve prediction of species' distributions from occurrence data. *Ecography* 29: 129–151.
6. Fick, S.E. and Robert, J.H. 2017. WorldClim 2: New 1-Km spatial resolution climate surfaces for global land areas. *International Journal of Climatology* 37(12): 4302–4315.
7. Komarevtseva E and Guseva A., Shoot formation model (architectural model) *Phlomis oreophila*. International Conferences “Plant Diversity: Status, Trends, Conservation Concept” 2020. P.3. <https://doi.org/10.1051/bioconf/20202400038>
8. Mavlonov B. et al., Bioclimatic Modeling of the Potential Distribution of the Western Tien-Shan Endemic *Tulipa kaufmanniana* Regel (Uzbekistan, Kazakhstan). *American Journal of Plant Sciences*, 2021, 12, 1468–1477. <https://doi.org/10.4236/ajps.2021.1210104>



ANALYSIS OF HIGH RISE RCC BUILDING ON SLOPING GROUND USING ETABS

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ABSTRACT

Hill buildings are different from those in plains; they are very irregular in horizontal and vertical plains. Hence, they are susceptible to severe damage when affected by earthquake ground motion. Analysis of buildings in hilly region is somewhat different than the buildings on leveled ground, since the column of the hill building rests at different levels on the slope. The other problems associated with hill buildings are, additional lateral earth pressure at various levels, slope instability, different soil profile yielding unequal settlement of foundation. The scarcity of plain ground in hilly regions leads to construct structure on sloping ground in plain region to construct high rise structure is predominantly known condition, but in case of hilly region it is very difficult. In this study the 3D analytical model of G+25 storey building is to be generated for symmetric and asymmetric case with varying type of frame configuration. Building models are analyzed and designed by E-TABS software. We are analyzing the high rise structures for seismic load i.e. equivalent static lateral force method and response spectrum method on sloping ground or hilly regions with varying sloping angles, symmetric frames and step back and set back with step back configuration with varying positions of shear walls by using E-TABS.

Keywords: Framed structure, Behavior of foundation, ETABS, Equivalent static lateral force method, Response spectrum analysis

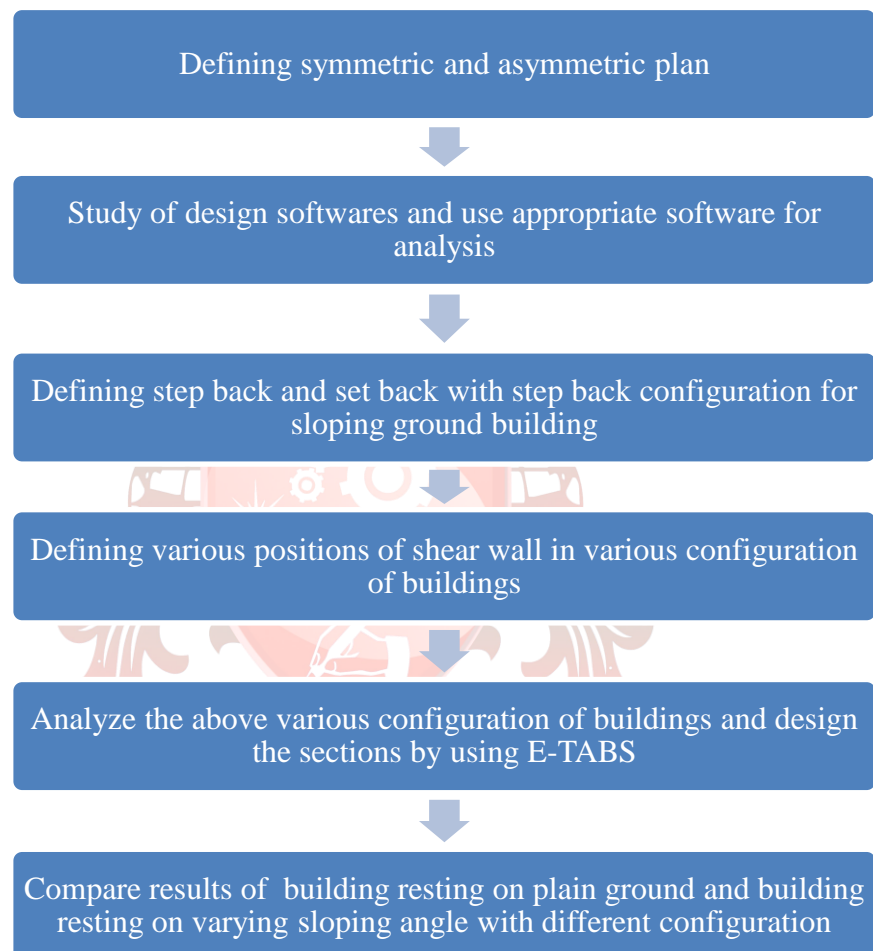
INTRODUCTION

Earthquake is the most disastrous due to its unpredictability and huge power of devastation. Earthquakes themselves do not kill people, rather the colossal loss of human lives and properties occur due to the destruction of structures. Building structures collapse during severe earthquakes, and cause direct loss of human lives. The economic growth and rapid urbanization in a hilly region has accelerated development of infrastructure and construction activities. Because of which, population density in the hilly region has increased. Therefore, there is popular and pressing demand for construction of multi-story building in hilly region. Hill buildings are different from those in plains; they are very irregular in horizontal and vertical plains. Hence, they are susceptible to severe damage when affected by earthquake ground motion. In sloping ground the height of the column is different at the bottom storey. It is asymmetric in plane and elevation. The short columns are most effects and damage occurs during the earthquake. Care should be taken for making this building earthquake resistance. The various methods are used for the analysis such as static and dynamic. Due to the asymmetry dynamic analysis must be used for seismic analysis of the building. These methods are time history and response spectrum method. In the response spectrum method the data such as zone factor, type of soil etc. are applied from I.S.-1893. In time history method the actual record of accelelogram is applied on the building and analysis of the building is carried out in software. Time history method gives more realistic result compared to the response spectrum method because in time history the actual acceleration data of earthquakes are applied and response of building is studied.

OBJECTIVES

- To determine the ground slope varying 0° , 10° and 20°
- To study the most effective configuration for base shear.
- To study the most effective configuration for time period.
- To study the most effective configuration for storey drift.
- To study the effectiveness of configuration of building frame on sloping ground such as set back with step back building and step back building.

METHODOLOGY



MODELING AND ANALYSIS

In a present study there are 3 group of building (i.e. configurations) are considered, out of which 1st is resting on 0° , 2nd is resting on 10° and 3rd is resting on 20° with set back and modeling and the analysis of building frames carried out using E-TABS software.

GEOMETRIC PROPERTIES AND MATERIAL PROPERTIES ARE GIVEN BELOW.

Number of storey	G+25
Floor Height	3m
No of bay in X direction	9
No of bay in Y direction	9
Spacing in X direction	4m
Spacing in Y direction	4m

Beam size	300X450mm
Column	300X550mm
Slab Thickness	150mm
Thickness of concrete shear wall	150mm
Live load	2kN/m ²
Floor finish Load	1kN/M ²
Concrete grade	M30
Steel	Fe415

➤ **Earthquake parameters :**

Type of frame	SMRF
Seismic zone	III
Response reduction factor	5
Importance Factor	1

According to the IS 1893 (part I)-2012 following methods have been recommended to determine the design lateral loads –

1. Equivalent Static Method
2. Response Spectrum Method

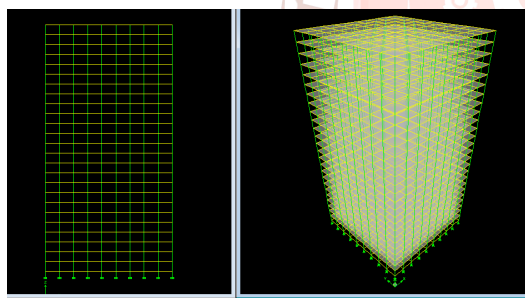


Fig 1. Symmetric plan configuration

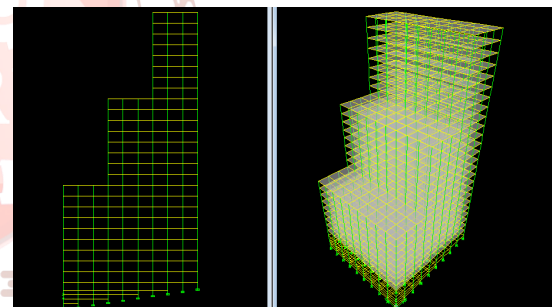


Fig 2. Asymmetrical plan configuration

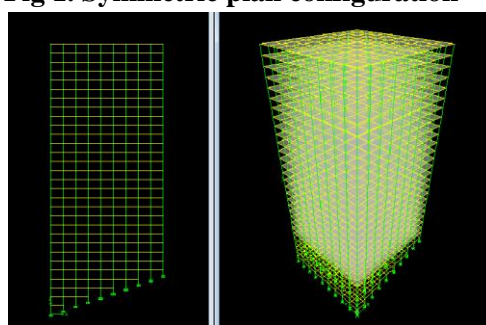


Fig 3. Step back configuration

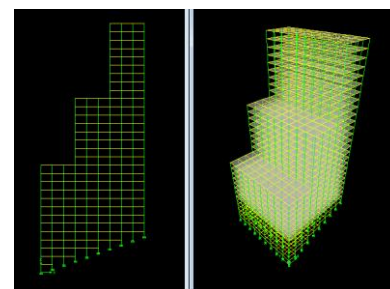


Fig 4. Set back with step back configuration

Defining various positions of shear wall :

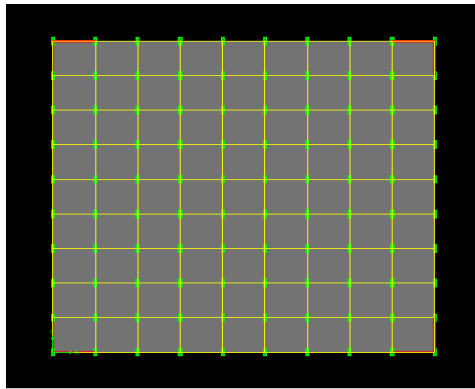


Fig 5 Shear wall at corner

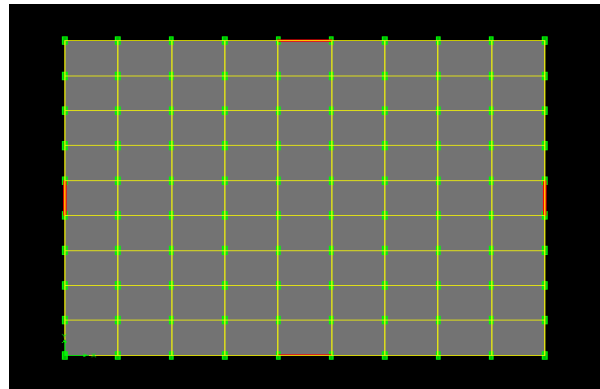


Fig 6. Shear wall at periphery

RESULTS AND DISCUSSION

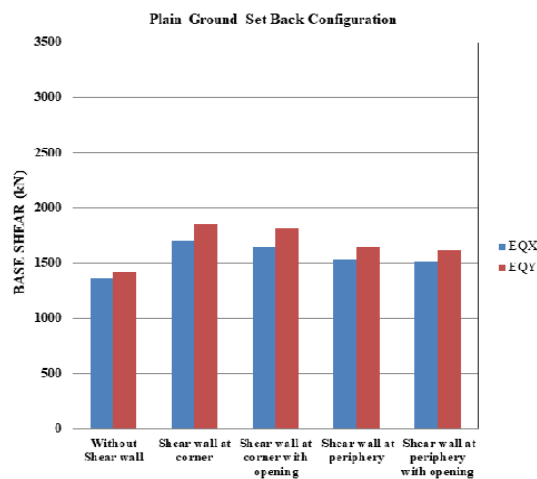


Fig. 3.1 Plain ground set back configuration base shear result.

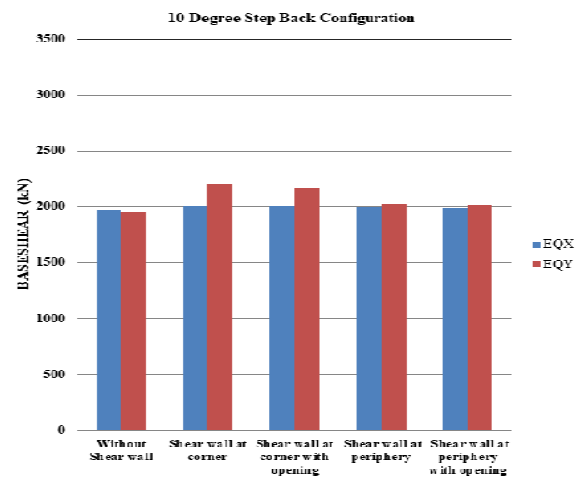


Fig. 3.2 10 Degree step back configuration base shear result.

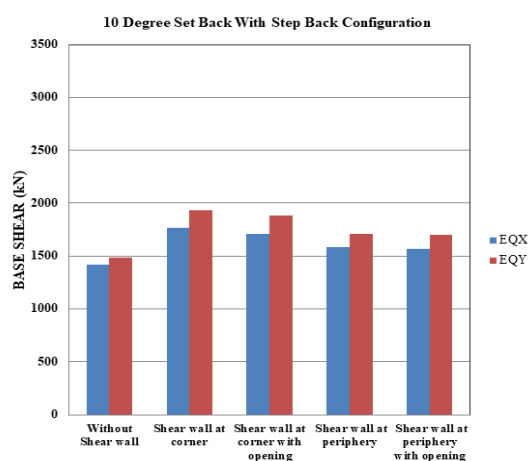


Fig. 3.3 10 Degree set back with step back configuration base shear result.

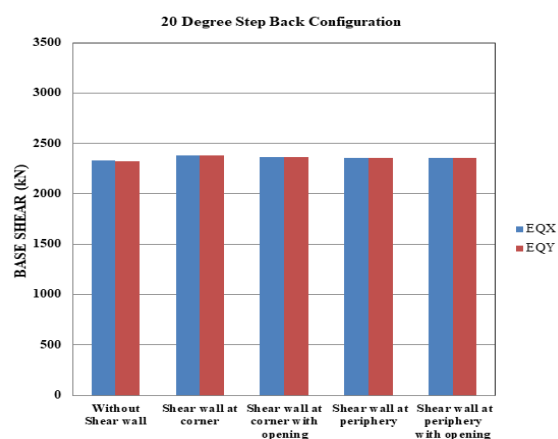


Fig. 3.4 20 Degree step back configuration base shear result.

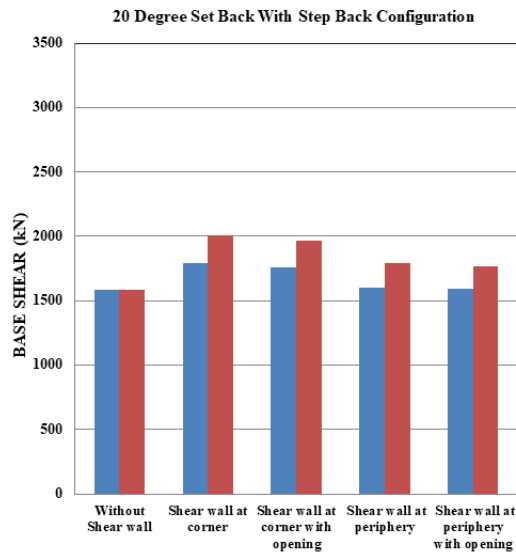


Fig. 3.5 20 Degree set back with step back configuration base shear result.

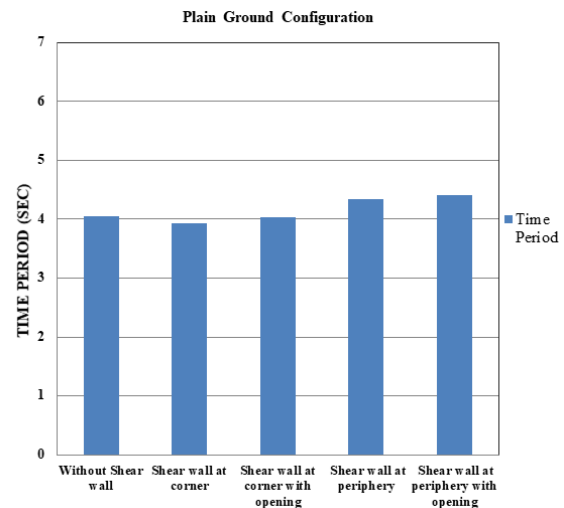


Fig. 3.6 Plain ground configuration time period result.

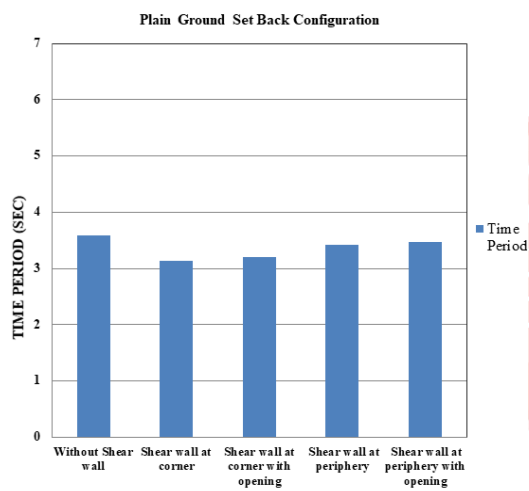


Fig. 3.7 Plain ground set back configuration time period result.

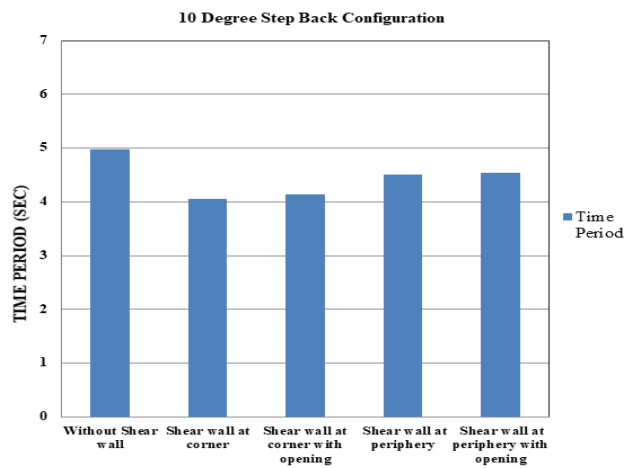


Fig. 3.8 10 Degree step back configuration time period result.

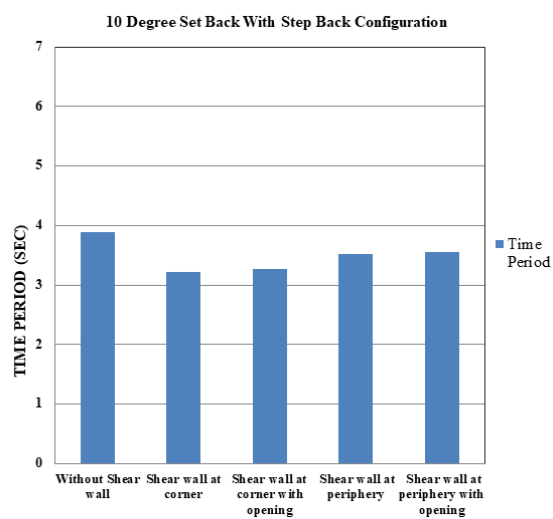


Fig. 3.9 10 Degree set back with step back configuration time period result.

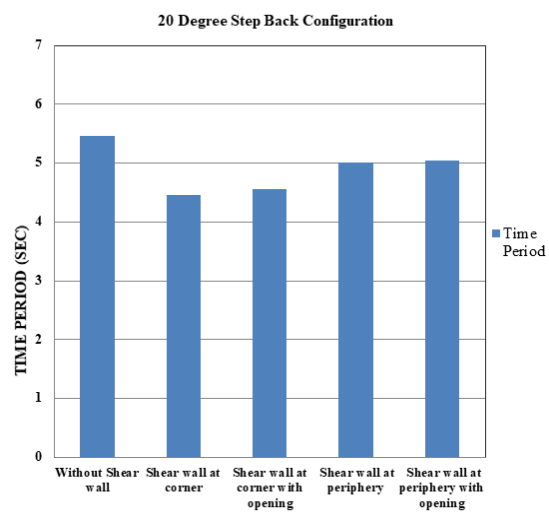


Fig. 3.10 20 Degree step back configuration time period result.

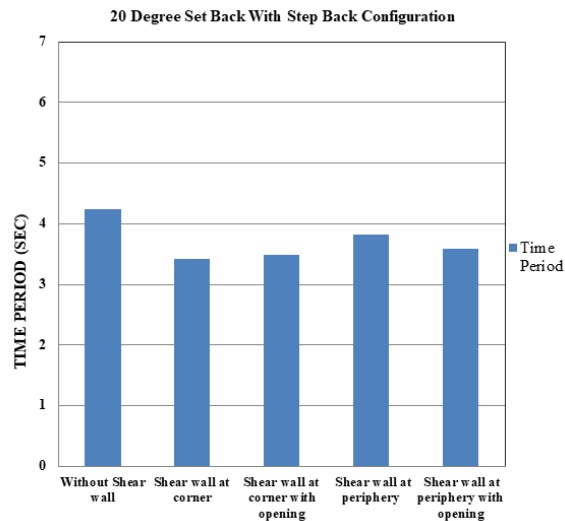


Fig. 3.11 20 Degree set back with step back configuration time period result.

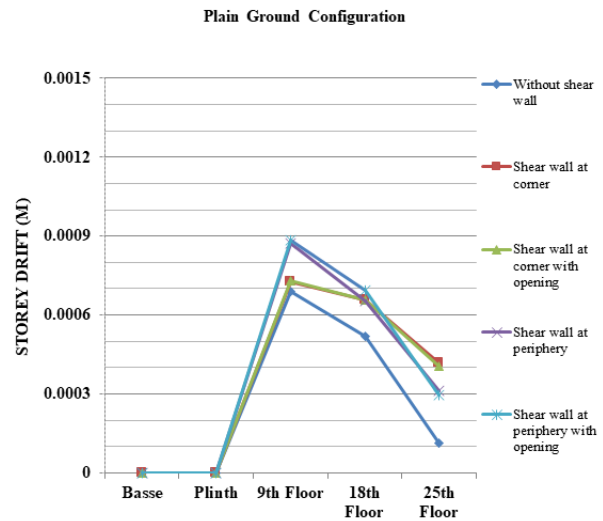


Fig. 3.12 Plain ground configuration storey drift result.

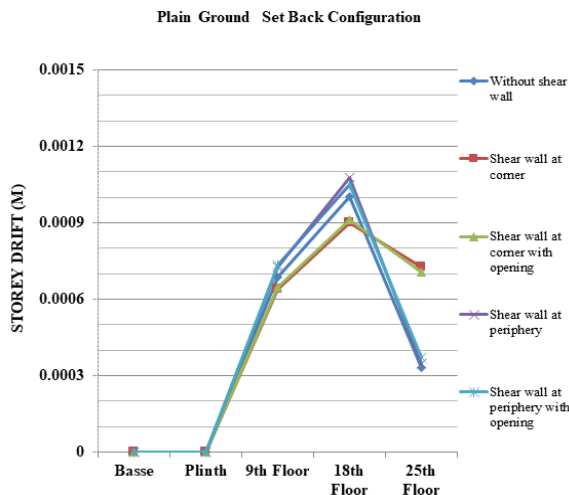


Fig. 3.13 Plain ground set back configuration storey drift result.

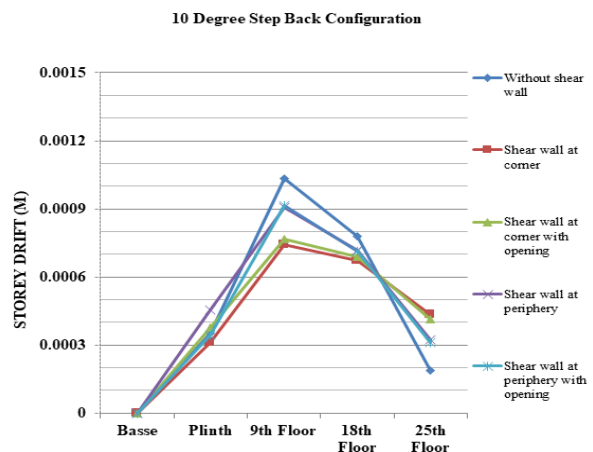


Fig. 3.14 10 Degree step back configuration storey drift result.

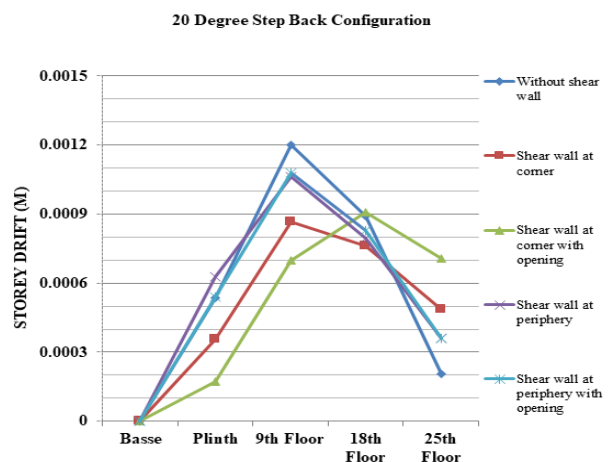
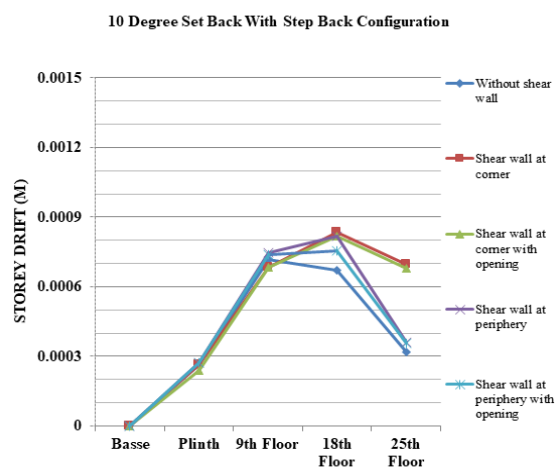


Fig. 3.15 10 Degree set back with step back configuration storey drift

Fig. 3.16 20 Degree step back configuration storey drift

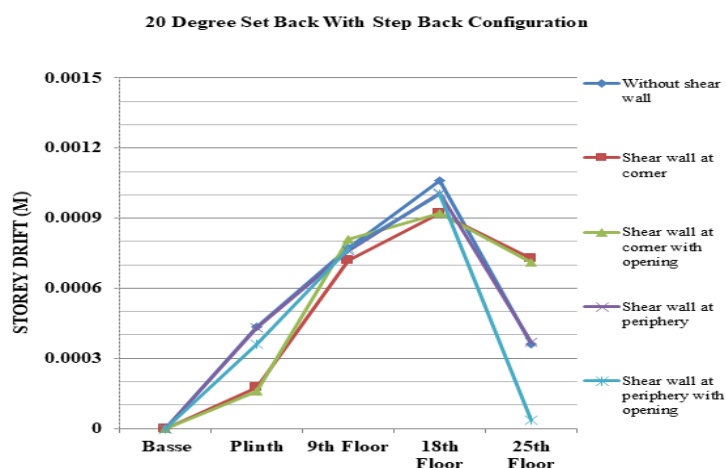


Fig. 3.17 20 Degree set back with step back configuration storey drift

DISCUSSION

- i. The base shear for plain ground configuration without shear wall is less as compared to other cases of plain ground configuration i.e. $EQX=1216.21\text{KN}$ and $EQY=1578.28\text{KN}$.
- ii. The base shear for plain ground set back configuration without shear wall is less as compared to other cases of plain ground set back configuration i.e. $EQX=1390.63\text{KN}$ and $EQY=1314.66\text{KN}$.
- iii. The base shear for 10 degree step back configuration without shear wall is less as compared to other cases of 10 degree step back configuration i.e. $EQX=1991.57\text{KN}$ and $EQY=1989.78\text{KN}$.
- iv. The base shear for 10 degree set back with step back configuration without shear wall is less as compared to other cases of 10 degree set back with step back configuration i.e. $EQX=1467.15\text{KN}$ and $EQY=1489.82\text{KN}$.
- v. The base shear for 20 degree step back configuration without shear wall is less as compared to other cases of 20 degree step back configuration i.e. $EQX=2326.34\text{KN}$ and $EQY=2326.34\text{KN}$.
- vi. The base shear for 20 degree set back with step back configuration without shear wall is less as compared to other cases of 20 degree set back with step back configuration i.e. $EQX=1480.82\text{KN}$ and $EQY=1589.12\text{KN}$.
- vii. The time period for plain ground configuration with shear wall at periphery with opening is more as compared to other cases of plain ground configuration i.e. 4.5seconds.
- viii. The time period for plain ground set back configuration without shear wall is more as compared to other cases of plain ground set back configuration i.e. 3.6seconds.
- ix. The time period for 10 degree step back configuration without shear wall is more as compared to other cases of 10 degree step back configuration i.e. 5.1seconds.
- x. The time period for 10 degree set back with step back configuration without shear wall is more as compared to other cases of 10 degree set back with step back configuration i.e. 3.8seconds.
- xi. The time period for 20 degree step back configuration without shear wall is more as compared to other cases of 20 degree step back configuration i.e. 5.7seconds.

- xii. The time period for 20 degree set back with step back configuration without shear wall is more as compared to other cases of 20 degree set back with step back configuration i.e. 4.6seconds.
- xiii. The storey drift for plain ground configuration without shear wall is less as compared to other cases of plain ground configuration i.e. 0.0006895meters.
- xiv. The storey drift for plain ground set back configuration with shear wall at corner with opening is less as compared to other cases of plain ground set back configuration i.e. 0.000912meters.
- xv. The storey drift for 10 degree step back configuration without shear wall is less as compared to other cases of 10 degree step back configuration i.e. 0.0007414m
- xvi. The storey drift for 10 degree set back with step back configuration without shear wall is less as compared to other cases of 10 degree set back with step back configuration i.e. 0.0007184meters.
- xvii. The storey drift for 20 degree step back configuration without shear wall is less as compared to other cases of 20 degree step back configuration i.e. 0.0008669meters.
- xviii. The storey drift for 20 degree set back with step back configuration with shear wall at corner with opening is less as compared to other cases of 20 degree set back with step back configuration i.e. 0.0009216meters.

CONCLUSIONS

- For base shear plain ground without shear wall configuration is most effective as compare to other configurations of plain ground, 10 and 20 degree sloping ground.
- For time period 20 degree step back configuration without shear wall is most effective as compare to other configurations of plain ground, 10 and 20 degree sloping ground.
- For storey drift plain ground configuration without shear wall is most effective as compare to other configurations of plain ground, 10 and 20 degree sloping ground.
- For sloping ground case set back with step configuration is most effective.

REFERENCES

1. A. V. Kulkarni, Mohammed Umar Farooque Patel, (2014), "A performance study and seismic evaluation of RC frame building on sloping ground"⁽¹⁾, IOSR e-ISSN: 2278-1684, p-ISSN: 2320-334X, PP51-58.
2. B.G. Birajdar, S. S. Nalawade, (August 2004) "Seismic Analysis of Building resting on sloping Ground"⁽²⁾, 13WCEE, Paper no. 1472.
3. Chaitrali Deshpande, (October-2014) "Effect of Sloping Ground on Step Back and Setback Configuration of R.C.C. Frame Building"⁽³⁾, (IJERT), Vol. 3 Issue 10, ISSN: 2278-0181.
4. H.S. Vidyadhara, Hassan Siddiqui, (October-2013) "Seismic Analysis of Earthquake resistance Multi Bay Multi Storied 3D –RC Frame"⁽⁴⁾, (IJERT) Vol. 2, Issue 10, ISSN: 2278-0181.
5. Mohammad Abdul Imran Khan, (April-2015) "Seismic Effect on Rc Building Resting on Sloping Ground"⁽⁵⁾, (IJSRT), Vol. 4, Issue 4, ISSN No. 2277-8179 .
6. Miss Pratiksha Thombre, Dr. S.G.Makarande, (June-2016) "Seismic Analysis of Building Resting On a Sloping Ground"⁽⁶⁾, (JETIR), Vol. 3, Issue 06, ISSN: 2349-5162.

7. Narayan Kalsukar and Satish Rathod. (June-2015) "Siesmic Analysis of RCC Building Resting on Sloping Ground with Varying Number of Bays and Hill slopes"⁽⁷⁾, (IJCET), Vol.5, Issue No.3, E-ISSN 2277-4106, P-ISSN 2347-5161.
8. Nagarjuna, (July-2015) "Lateral Stability of Multistory Building On Sloping Ground"⁽⁸⁾, (IRJET), Vol. 02, Issue 4, e-ISSN:2395-0056, p-ISSN 2395-0072.
9. Shivanand B. and H. S. Vidyadhara, (August 2014) "Design of 3D RC frame on sloping ground"⁽⁹⁾ (IJRET)" Vol. 03, Issue 08, e-ISSN: 2319-1163, p-ISSN: 2321-7308.
10. Dr. T.V. S. Varalakshmi, (May 2016), "Comparison Study of Zone II and zone IV by Considering Different Angles of Sloping Ground For The Analysis of Multi-storey Building by Using E-Tabs"⁽⁹⁾, (IJSETR), Vol. No. 05, Issue No. 10, ISSN: 2319-8885, Page No. 2107-2119.

IS CODES:-

1. IS Code:1893-2012, "Criteria for Earthquake Resistant Design of Structures (Part I) General Provision and Buildings, Bureau of Indian Standards.
2. IS 456-2000, "Plain and Reinforced Concrete-code of Practice, Bureau of Indian Standards
3. IS 13920-1993,"Ductile Detailing of Reinforced Concrete Structures Subjected to Seismic Forces-code of Practice", Bureau of Indian Standards.



COMMENTARY ON THE HADITHS IN ARBA'IN

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ANNOTATION

The article analyzes the mystical ideas put forward by Alisher Navoi in his work "Arba'in" ("Forty Hadiths"). Almost all of Alisher Navoi's works contain verses and hadiths, Islamic wisdom, and mystical views, including Waqfiya, Arba'in, Sirojul Muslimin, Munajat, and Risalai Tiyr Andokhtan. Among Navoi's works on religious themes, Arba'in is significant in that it is devoted to the interpretation of hadiths. This work is a poetic interpretation of 40 popular hadiths written under the influence of Abdurahman Jami's sahih al-Hadith.

Keywords: Alisher Navoi, Arba'in, hadith, verse, rubai, religion

His real name is Nizomiddin Mir Alisher. He was born in Herat and spent most of his life there of Navoi. His father, Giyosiddin Bahodir, was close to the Timurid dynasty. The joy and talent of poetry awoke early. As a child, he memorized Farididdin Attar's Mantiqut-tayr and came to the attention of Sharafiddin Ali Yazdi. Mawlana Lutfi praised the young poet's talent and won the recognition of Kamol Turbati.

Educated by Sayyid Hasan Ardasher and Pahlavon Muhammad, he worked with Abdurahmon Jami. Until 1469, Navoi was far from Herat due to internal conflicts between the Timurids lived.

When Hussein Boykaro ascended the throne of Khorasan (1469), a new stage in Navoi's life and work began appointed to the post of seal (1469), ministry (1472) and khokimiyat of Astrobod (1487). 1480-1500 several madrassas, 40 rabots (stops for travelers), at their own expense.

It will build 17 mosques, 10 khanaqahs, 9 baths, 9 bridges and 20 swimming pools.

According to him, Navoi could interfere in all affairs of the state.

Alisher Navoi's biography includes historians and statesmen such as Khandamir, Wasifi, Hussein Boykaro, and Babur reflected in the works of his masters.

Uzbek scientists Ozod Sharafiddinoy, V.Mahmud, Oybek, Yahyo Gulomov, Izzat Sultan, A.Zohidov, V.Abdullaev, A.Kayumov, S.Ganieva and others created works about Navoi's way of life.

In 1947, Komil Yormatov shot the film "Alisher Navoi". Here are 15 facts about the life of Alisher Navoi: 1. Navoi's passion for science awoke early and he started school at the age of four. Navoi At the age of 7, he memorized Farididdin Attar's Mantiqut-tayr. 2. 7-year-old Nizamiddin Mir Alisher More than six thousand hadiths of our great muhaddith Bukhari. He knew his sheriff by heart.

Mir Alisher started writing poems at the age of 7-8.

3. Alisher Navoi was awarded the title of "Muqarrabi hazrati sultoni" ("the closest person of the sultan"). received The title gave Navoi the right to interfere in all affairs of the state. 4. The revival of the Turkic language was Navoi's great courage for our spirituality.

Zahiriddin Muhammad Babur said, "They recited poetry in Turkish, but no one recited so much". Hussein Boykaro wrote, "Mir Alisher gave life to the dead body of the Turkish language with the breath of Christ".

5. Alisher Navoi at the age of fifteen or sixteen as a "bilingual" poet who wrote in both Turkish and Persian. 6. During his adolescence, Alisher Navoi memorized more than 50 poems by his favorite poets. 7. Alisher Navoi's poems written in Turkish are called Navoi, his poems in Persian are called Foni. The poet's collection of Persian poems is called "Devoni Foni".

8. The name "Guli", described as Navoi's lover, is found only in folklore, the legend of Navoi and is found only in legends. Guli's name is a note about Navoi's life does not occur in any of the sources.

9. In Navoi's works, Farhod is a symbol of a perfect man. He has been thirsty for knowledge since childhood and once he will never forget what he read. When Farhod reaches the age of ten, he can master all the sciences.

10. Navoi met Abdurahmon Jami at the age of about 18-19. Jami made him both a child and valued as a student. Then the teacher-disciple relationship between these two great poets further strengthened and becomes a creative collaboration.

11. Samarkand plays an important role in the life and work of Navoi. Alisher to Samarkand in 1464 come and study here in a madrasa and get acquainted with science, literature and art.

12. "Hilaliya" consisting of 1469 bytes on the occasion of the accession to the throne of his friend Hussein Boykaro in 90 writes a poem ("crescent" - a new moon). 13. Navoi has more than 300 facilities in Herat and the whole country of Khorasan at the expense of his fund built 14. Alisher Navoi created in 16 literary genres. Navoi wrote the first "Khamsani" in Turkish for 2 years. This work has been translated into 64 languages of the world and has more than 51 verses.

The total volume of the poet's lyrical heritage There are more than 50000 verses in four devons (1491-1498) called "Khazoinul-maoniy". 15. Alisher Navoi died on January 1501, 3. It was raining lightly during his burial. Historian Khandamir described it as "even nature mourned". Alisher Navoi's childhood coincided with the last years of Shah Rukh's rule. He is a Temurid, in particular brought up with the future king Hussein Boykaro. At the age of 4, he went to school and quickly became literate began to read and memorize poems in Turkish and Persian. In addition to Uzbek, Persian is also excellent occupied. After the death of King Shah Rukh on March 1447, 12, there was a mutual quarrel between the contenders for the throne. The wars forced many people to move from Khorasan in different directions.

The Alisher Navoi family moved to Iraq in search of peace (1449). Alisher is famous in Taf

He will meet with the author of the historical work "Zafarnoma", poet Sharafiddin Ali Yazdi. This encounter is bright in the child impresses. Ghiyosiddin Bahodir's family returned to Herat about two years later. Abulqasim Bobur Ghiyosiddin appointed Bahodir governor of Sabzavor. Alisher Navoi stayed in Herat and continued his studies he said.

Alisher Navoi was very interested in poetry and studied Oriental literature. The family environment is in it from childhood had a great interest in literature. His uncles Mirsaid-Kabuli and Muhammad Ali-Gharibi were great poets. Poets often gather at the Alisher Navoi House to recite poetry and talk about literature and art.

Alisher Navoi began writing poetry at the age of 10-12. According to historian Khandamir, the young Alisher Satisfied with Navoi's talent, Mawlana Lutfi said:

*Orazin is covered, tears are falling from my eyes every moment,
My neck, the rising star, the rising sun*

Listening to his ghazal, he said: "If it were possible, I would have given my twelve thousand Persian and Turkish verses.

I would exchange it for a gazelle. At the age of 15, Alisher Navoi became widely known as a poet. His poems are Turkish (Under the pseudonym Navoi) and Persian (under the pseudonym Foni).

Alisher Navoi's father died when he was 13-14 years old. He was brought up by Abulqasim Babur, the elder highly respected for his artistic talent. In October 1456, the country's capital was moved from Herat to Mashhad, Abulqasim took both young Alisher and his servant Hussein Boykaro to Mashhad. 1457 in the spring of the year, Abulqasim Babur also died suddenly. For Alisher Navoi, this was after his father's death. He will continue his studies at one of the madrassas in Mashhad. His friend Hussein Boyqaro while Merv and Charjoi go in search of luck. Khorasan is another representative of the Timurids, Movarounnahr ruled by Sultan Abu Said and moved his capital from Samarkand to Herat. Hussein Boykaro's throne his first opponent on the road to capture was Abu Said. Alisher Navoi's family is on Hussein's side, primarily because of their family ties.

Explained; the new ruler was also well aware of this. This situation in the middle is the life of Alisher Navoi complicated. Alisher Navoi lived in Mashhad as an ordinary mullah.

He wrote many poems about his homeland. In the meantime, especially in the summer, he used to go to Herat. In 1463 he returned to Herat. But here the situation has changed, the city is in ruins had become. In the capital of Khorasan, Sultan Abu Said established his order, with him on important tasks People from Movarounnahr were appointed, people close to Alisher Navoi were persecuted, Hussein. His uncles Mirsaid and Muhammad Ali, who went with Boykaro, were killed in the war finding a place was a problem. Alisher Navoi's condition in those days was that of his later mentor Sayyid Hasan.

In the poetic lines of his letter to Ardasher from Samarkand, he expressed it in a very moving and honest way given.

Alisher Said, who had become a well-known poet in the country at that time, was persecuted by Abu Said and expelled from Herat sends. The poet was forced to leave for Samarkand. Alisher Navoi in Samarkand from 1465 to 1469 lived until the spring, studied at the Fazlullah Abu Lays Madrasa, furthering his knowledge of various disciplines deepened. Prominent poets of Samarkand - Sheikh Suhayli, Mirzobek, Mavlonov Khovariy, With Mir Karshi, Harimi Qalandar, problematic Uloyi Shoshi, scholar Mawlana Muhammad Alim and others became interlocutors and became friends. The mayor of Samarkand, Ahmad Hojibek, was originally from Herat and was nicknamed Vafoi wrote poems with, he looked at Alisher Navoi with special respect and attention. With his help Alisher Navoi also began to engage in state affairs. This is his first experience in public administration gained on the ground, and this helped him later. Alisher Navoi's political and state activity in Samarkand was highly valued and was given the title of "Emir of Chigatay".

In early 1469, Sultan Abu Said was killed by his soldiers in Karabakh. It's been that way for a long time Hussein Boykaro, who was waiting for the situation, immediately came and took the throne of Herat. Alisher Navoi also went to Herat arrives. On April 1469, 14, Alisher at a reception on the occasion of Eid al-Fitr Navoi presents his new poem "Hilaliya" to Hussein Boykaro. King Alisher Navoi appoints to the post of seal.

Alisher Navoi arrested Hussein Boykaro's most dangerous political rival, Yodgor Muhammad Mirza, at night shows personal courage in taking. Dissatisfied with the new government's excessive taxes, he revolted acts with justice and courage in appeasing the masses of the people. A certain time after these events later, with the consent of Alisher Navoi to the post of seal in the government of Hussein Boykaro Samarkand friend, poet Sheikh Suhaili will be appointed. Alisher Navoi's goal is to be a consultant at the palace to stay was

to be more creative. However, in February 1472, Hussein Boykaro adopted it appoints him prime minister of the palace and gives him the title of "Emir of the Tomb."

In his new position, Alisher Navoi first of all focused his efforts on establishing peace and tranquility in the country. He began to organize the work of the foundation. Great for the development of trade and handicrafts in the cities pays attention. Thanks to the efforts of Alisher Navoi, the agricultural culture is growing in the villages.

The study and popularization of Navoi's work became widespread. Navoi branch of literary criticism occurred. Among the scientists and writers in this field are Oybek, O. Sharafiddinov, S. Ayni, V. Zohidov, Izzat Sultan, A. Qayumov, P. Shamsiev, H. Sulaymonov, N. Mamaev, S. G'anieva, A. Hayitmetov, A. Abdugafurov, A. Rustamov and others have done significant work, dozens of PhD and doctoral dissertations on the works of Alisher Navoi dissertations were written. Author Oybek has written a novel "Navoi", Izzat Sultan has a documentary "Navoi's book of hearts" L. Bat created the story "The Garden of Life", Mirkarim Osim created a series of stories. Especially the next 50 years There have been fruitful years in Navoi studies. The book funds of Alisher Navoi's works in our country and abroad almost all the rare copies kept in the libraries of the fifties were studied.

The scientific critical text of many works of Alisher Navoi has been developed. "Devoni Foni" and others Rare copies of his works were found and published. The real stage life of Alisher Navoi in the 20th century started. Izzat Sultan and Uygun drama "Alisher Navoi" (1945, 1948), I. Mahsumov composers Yu. In collaboration with Rajabi and S. Jalil, he wrote the musical drama "Navoi in Astrobod" (1967). Alisher Navoi the image was also embodied on the movie screen. "Farhod and Shirin" based on the epics of Alisher Navoi musical drama (1937), opera "Layli and Majnun" (1942), ballet "Suhayl and Mehri" (1967), "Dilorom" opera (1958), the drama "Alexander" (1991) became one of the best works of theatrical art. But it was cultural during the colonial period, which lasted for almost a century and a half, especially during the Soviet regime there have been attempts to interpret our heritage in a way that is alien to our people. This is Alisher Navoi also found expression in his attitude to his work. To describe him as a friend of the poor, an opponent of the landlords sought. It is remarkable in his masterpieces of world literature (e.g., in the epic Hayrat ul-abror) chapters were published in abbreviated form. The life and work of Alisher Navoi is believer in Allah, everyone in the Qur'an it is the life and work of a writer and thinker who considered a verse sacred and accepted the Naqshbandi sect. To understand the essence of his work, he knew the history of religion, read the Qur'an and understood its meaning.

must be an adult. The Soviet system forbade the propagation of religious sciences. So, though Although Navoi scholars have done much to promote the poet's work, Alisher Navoi's work remained incomprehensible to most readers. Independence is among all our values Alisher.

It opened wide horizons for the study of Navoi's heritage. Now he really understands the essence of his work there was an opportunity to learn.

In 1991, the 550th anniversary of Alisher Navoi was celebrated. Uzbekistan named after Alisher Navoi.

The State Prize of the Republic of Kazakhstan was established. The Alisher Navoi National Park of Uzbekistan has been established in Tashkent and a majestic statue of the poet was erected in the middle of the garden. A collection of the poet's perfect works in

was published. The memory of Alisher Navoi is highly respected in our country. A province, a city, a university (Samarkand State University), Tashkent State Library, Academy of Sciences of Uzbekistan Language and Institute of Literature, Museum of Literature, Grand Academic Opera and Ballet Theater in Tashkent, Palace of Arts.

REFERENCES

1. Arba'in / Prepared by: Karimbek and Saidbek Hasan; Commentator A.Rustam. T.: Meros, 1991.
2. Arba'in: Forty Hadith Commentaries / Preface and Commentators: Q.Ahad, O.Mahmud. T.: Literature and Art, 1995.
3. M.Hakimov. Description of Navoi's manuscripts. T.: Fan, 1983.



CONNECTION OF MODERN METHODS IN FRENCH AND UZBEK**Imamova Zulayxo To'xtaxo'jaevna**

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ABSTRACT

Teaching as a guide involves the presentation, communication by the teacher of certain knowledge and the management of the process of their mastery by all students in the class. Therefore, the teacher not only presents information on his subject, but also plans, organizes and monitors the student's educational activities, develops the skills of educational work, thinking, ability, and the ability to apply knowledge in practice.

Key words: *Techniques, method, concept, pedagogical, teaching, activity.*

The teaching method cannot be invented; it develops gradually. Its development can be compared to the improvement of a mechanical device. Both the one and the other, primitive at the beginning, are gradually being improved by the combined efforts of generations. From the point of view of the leading role of the teacher, teaching methods can be assessed as ways of organizing educational and cognitive activity of students and managing this activity. Emphasizing the cognitive orientation of existing methods, they can be defined as the ways in which students under the guidance of a teacher go from ignorance to knowledge, from incomplete and imprecise knowledge to fuller and more accurate knowledge. From the logical-content point of view, teaching methods can be assessed as an applied logical method with the help of which students consciously master knowledge, skills and abilities. Wishing to emphasize the substantive and methodological essence of teaching methods, they can be defined as a form of movement of the teaching content.

Each method includes a variety of teaching techniques. Each of the techniques is designed to bring students closer to the ultimate learning goal. A technique is nothing more than an elementary methodological act aimed at solving a specific problem at a certain stage, in other words, a technique is an element of a method, its integral part, a one-time action, a separate step in the implementation of the method.

Techniques are central to the learning activity of students and have a decisive influence on it. Thanks to the skillful combination of interrelated techniques, the teacher manages to increase the effectiveness of the educational process, to show his methodological skills. Working with isolated lexical units on the blackboard, analyzing the structure of written sentences, controlling loud pronunciation of words, phrases, naming objects in pictures - all these are examples of techniques thanks to which the solution of separately posed problems is achieved. But it should be noted that the weak level of formation of techniques is one of the reasons for the difficulties that students face in learning, especially when doing home independent work.

In contrast to the technique, the method should be considered as the second and higher level of generalization.

Each teaching method serves to achieve a specific goal, is designed for a specific time, for students of a certain age, with a certain level of development and training, for teachers who can work with this method, and for those conditions that exist in the school and in society as a whole.

A capable teacher who has developed a series of techniques that, in his opinion, seem to be the best for the conditions in which these techniques appeared, cannot but be skeptical of what he himself created. He knows that the best method is perfection, and man-made perfection is a ghost, and therefore the best method always remains only a beautiful ideal. The better the teacher knows his discipline, owns the pedagogical, psychological

laws of the learning process, the more likely he will choose the most effective teaching method in terms of pedagogy.

Any method should always be flexible. Consequently, a method is a certain set of teaching methods aimed at achieving a certain goal within a certain period of time, in the presence of certain teaching aids, taking into account the age, general development of the student, as well as school and society.

A technique is an integral part or a separate side of a method. For example, in the method of organizing the work of students with a textbook and a book, the following techniques are distinguished: note-taking, drawing up a synopsis plan, formulating abstracts, quoting, reviewing, writing a dictionary of the topic covered.

Individual techniques can be part of different methods. So, the technique of drawing up a schematic model can act as an element both as a method of working with a textbook or book, and as an element of another method - the teacher explains new material, when students make up a schematic model (basic outline) of a new lesson material.

One and the same method of teaching in some cases can act as an independent method, and in others - as a method of teaching. For example, explaining is an independent teaching method. However, if it is only occasionally used by the teacher in the course of practical work to explain the mistakes of students or to reveal the logic of solving a problem, then in this case the explanation acts only as a teaching technique that is part of the method of practical work.

Method and technique can be reversed. For example: the teacher leads the presentation of new material by the method of explanation, during which, for greater clarity and better memorization, draws the students' attention to the text or graphic material in the textbook. Such work with a textbook acts as a technique. If, in the course of the lesson, the method of working with a textbook is used, then the additional explanation of a term by the teacher no longer acts as a method, but only as a small additional technique. Thus, different ways of training.

REFERENCES

1. Merkulova I.I. The system of problem tasks in teaching reading // IYASH, 1991, No. 6.
2. Mirolyubov A.A. Audio-lingual method // IYASH, 1995, No. 4.
3. Mirolyubov A.A. Palmer's method // IYASH, 1995, No. 1.
4. Rabinovich F.M., Sakharova T.V. Intensive teaching methods and high school. - Foreign languages at school, 1991, No. 1.

SOCIOLINGUISTICS AND ITS HISTORY**Inagamova Nargis Abdullaevna**

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ABSTRACT

The first ideas about the social diversity of language appeared in the early seventeenth century. Gonzalo de Correias, a professor at the University of Salaman in Spain, writes of the social diversity of language: These are the languages of the villagers, the common people, the townspeople, the nobles, the courtiers, the historians, the clergy, the elderly, the men, the women and even the children.

Key words: *Sociolinguistic, development, language, subject.*

Sociolinguistics is a branch of linguistics that studies language and its place and role in society. Sociolinguistics is closely related to the disciplines of linguistics, such as psycholinguistics and ethnolinguistics. Sociolinguistics was first used in the world of science by Athanasius Selishev in the 1920s, and was developed by Uriel Weinreich and William Labov in the 1950s and 1970s. The main purpose of sociolinguistics is to study how people who make up a community use a language and how changes in the society in which that language operates affect language development. These goals are consistent with the two main problems of sociolinguistics, the problem of social differentiation of language and the problem of social conditioning of language development. The subject of sociolinguistics consists of a wide range of concepts, including language and nation, the manifestation of national languages as a historical category, social differentiation of language, the interdependence of linguistic and social structure, typology of linguistic phenomena, the social aspect of multilingualism. . Such notions are directly related to the notions of "language and nation", which help to properly organize the social relations of the nation and bring it to certain standards. This, in turn, leads to a number of other concepts. The existence of a language is based on certain linguistic contexts and concepts - regional usage, regional and social dialects, and their ethnic origins. Today, the study of sociolinguistic situations is of methodological importance with the specificity of the objects of observation, the possibility of making observations, inspections, clarifications, and the possibility of conducting various experiments. In the synchronous study of modern linguistic materials it is possible to very accurately identify the subject and units of sociolinguistic analysis, to predetermine the research process, to develop models of their description, to determine the level of comprehensibility of advanced concepts and theories, to create a clear terminological framework. It is through these that chronological images of language development in other, more distant periods can be studied and used for diachronological research. Another sociolinguistic problem is the social aspects of bilingualism. Conditionally, the bilingualism of two languages is to some extent related to each other. The more languages there are in a society, the more different the worldview will be. Direct intercultural relations also take different and similar forms. Social opinion is always developed by the majority.

It is no secret that language is constantly evolving and polishing in society. Language is a phenomenon unique to human society. People receive information and communicate through language. Therefore, since the emergence of language, in the process of development, the need for a comprehensive study of language in society has increased. While linguist E. Durkheim argues that language is the wealth of society, another linguist A. A. Leontev argues that it is a form of social life. A similar idea can be found in G. Leibniz. He recognizes language as a mirror of the human psyche. Indeed, language has the ability to inform a nation about its culture, people's temperament, and their worldview. It should be noted that in order to learn a foreign language well or

to express one's thoughts freely in that language, it is necessary to develop a sense of language and speech intuition. At the same time, each language has its own appearance and language code that is clear only to language owners. That is, the foreign language learner does not understand or does not understand the elements of the culture of the nation in the language of the country where he is studying, due to his lack of vocabulary, inability to use the necessary expressions, misunderstanding of culture, general opinion may not be able to come. Therefore, the national elements of the nation that use the language in any language begin to be reflected. Or if the language is the mother tongue of several nations, that is, the internal language, then we can see that different manifestations of the same language appear. This is the effect of social life on language. This is exactly what sociolinguistics is all about. During the development of society, various theories and views on the relationship of language to society have emerged, with some groups understanding language as a living organism, while others accept it as an unchanging reality.

REFERENCES

1. Arora, S. The Perception of Proverbiality. De Proverbio. 1984. – 244p.
2. Azar B.S. Understanding and Using English Grammar. Third Edition. – N. – Y.: 1999. – 420 p.
3. Broukal M., Pineiro C. Grammar. Form and Function. N1. McGraw-Hill. – New-York.: 2004. – 416 p.
4. Broukal M., Pineiro C. Grammar. Form and Function. N2. McGraw-Hill. – New-York.: 2004. – 265 p.



PREDICTION OF ACADEMIC PERFORMANCE FOR HIGHER EDUCATION STUDY USING DATA MINING CLASSIFIER AND MONGODB

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ABSTRACT

Educational Data Mining is an emerging interdisciplinary research area that deals with the development of methods to explore data originating in an educational context. EDM uses computational approaches to analyse educational data in order to study educational questions. This paper surveys the most relevant studies carried out in this field to date. Firstly, it introduces EDM and describes the different groups of users, types of educational environments and the data they provide. It then goes on to list the most typical/common tasks in the educational environment that have been resolved through data mining techniques and finally some of the most promising future lines of research are discussed. With the overwhelming successes gained in Big Data analysis in the Business Industry, it is little wonder that there is a strong belief in the academia that these successes can be replicated in the Education Sector. As new findings and outcomes of research crop up daily, it is my belief that amongst these successes potentially identifiable, prediction of students' academic performance can have strong positive influences in knowledge management and delivery in education thereby adding more quality to the learning experience.

Keywords— *Data Mining, Student Database Mapping, Prediction analysis, Educational dynamics of behavior.*

INTRODUCTION

Educational Data Mining (EDM) is the application of Data Mining (DM) techniques to educational data, and so, its objective is to analyse these types of data in order to resolve educational research issues. DM can be defined as the process involved in extracting interesting, interpretable, useful and novel information from data. It has been used for many years by businesses, scientists and governments to sift through volumes of data like airline passenger records, census data and the supermarket scanner data that produces market research reports. EDM is concerned with developing methods to explore the unique types of data in educational settings and, using these methods, to better understand students and the settings in which they learn. On one hand, the increase in both instrumental educational software as well as state databases of student information has created large repositories of data reflecting how students learn. On the other hand, the use of Internet in education has created a new context known as eLearning or web-based education in which large amounts of information about teaching-learning interaction are endlessly generated and ubiquitously available. All this information provides a gold mine of educational data. EDM seeks to use these data repositories to better understand learners and learning, and to develop computational approaches that combine data and theory to transform practice to benefit learners. EDM has emerged as a research area in recent years for researchers all over the world from different and related research areas such as

- Offline education tries to transmit knowledge and skills based on face-to-face contact and also study psychologically on how humans learn. Psychometrics and statistical techniques have been applied to data like student behaviour/performance, curriculum, etc. that was gathered in classroom environments
- E-learning and Learning Management System (LMS). Elearning provides online instruction and LMS also provides communication, collaboration, administration and reporting tools. Web Mining (WM) techniques have been applied to student data stored by these systems in log files and databases.

➤ Intelligent Tutoring (ITS) and Adaptive Educational Hypermedia System (AEHS) are an alternative to the just-put-it-on-the-web approach by trying to adapt teaching to the needs of each particular student. Data Mining has been applied to data picked up by these systems, such as log files, user models, etc.

The EDM process converts raw data coming from educational systems into useful information that could potentially have a great impact on educational research and practice. This process does not differ much from other application areas of data mining like business, genetics, medicine, etc. because it follows the same steps as the general data mining process: pre-processing, data mining and post-processing. However, it is important to notice that in this paper the term data mining is used in a larger sense than the original/traditional DM definition. That is, we are going to describe not only EDM studies that use typical DM techniques such as classification, clustering, association rule mining, sequential mining, text mining, etc. but also other approaches such as regression, correlation, visualization, etc. that are not considered to be DM in a strict sense. Furthermore, some methodological innovations and trends in EDM such as discovery with models and the integration of psychometric modelling frameworks are unusual DM categories or not necessarily universally seen as being DM.

The full paper is written as follows: Section II review the related works of Educational data mining and prediction result using machine learning algorithm. The ML algorithm concerns and potential risks of huge data are debated in Section III. The integrated proposed system and methodology of different classification and challenges, objective, flow system, and different methods is discussed in Section IV and V. The experimental results and accuracy calculation and GD points with 2-layer classification are presented in Section VI. Finally, Conclusions and future work are presented in Section VII.

REVIEW OF LITERATURE

Despite the amount of research interest, the LA/EDM domain has received and is currently still receiving, some researchers are of the belief that there are a number of unexplored issues in this rapidly growing domain and have suggested the incorporation of some other emerging research technologies with LA/EDM. One of such suggested technologies is Game-Based Learning (GBL). Conolly et al., (2012), postulated that “playing computer games is linked to a variety of perceptual, cognitive, behavioral, affective and motivational impacts and outcomes.” Papamitsiou and Economides (2014) acknowledged that GBL has positive impacts on learners and suggested that an interesting area of future research would be to find out if and how LA/EDM methods could be applied to report and visualize learning processes during GBL.

Another emerging technology rapidly developing is that of mobile and ubiquitous learning. Mobile Learning has been acknowledged for the unique opportunity it affords learners authentic learning experiences anytime and anywhere (Tatar et al., 2003). Papamitsiou and Economides (2014) suggest that LA/EDM research could investigate the appropriateness of the popular methods in mobile and ubiquitous learning contexts as illustrated by (Chen and Chen, 2009; Leong et al., 2012), in order to provide sophisticated, personalized learning services through mobile applications.

In the same vein, several regression techniques have also been used for predication. Kotsiantis and Pintelas (2005), used model trees, linear regression, neural networks, support vector machines and locally weighed linear regression to predict students' marks in an open university. Linear regression prediction models have been used for predicting end-of-year accountability assessment scores (Anozie and Junker, 2006) while a multivariable

regression model was used by Yu et al., (1999), to predict student performance from log and test scores in web-based instruction.

Stepwise linear regression was used for predicting student academic performance (Golding and Donalson, 2006) while multiple linear regression was used for predicting time to be spent on a learning page (Arnold et al., 2005). Martinez (2001), identified variables that could predict success in college courses using multiple regression while Thomas and Galambos (2004), used regression and decision trees analysis for predicting university students' satisfaction. Linear regression was used for predicting exam results in distance education courses (Myller et al., 2002), for predicting end-of-year accountability assessment scores (Anozie and Junker, 2006) and also for predicting the probability that the student's next response is correct (Beck and Woolf, 2000). Logistic regression was used for predicting when a student will get a question correct and association rules to guide a search process to find transfer models to predict a student's success (Freyberger et al., 2004). Robust Ridge regression algorithm was used to predict the probability of a student giving the correct answer to a problem (Cetintas et al., 2009) while stepwise regression was used to predict a student's test score (Feng et al., 2005).

Correlation analyses have been applied together to predict web-student performance in on-line classes (Wang and Newlin, 2002), to predict a student's final exam score in online tutoring (Pritchard and Warnakulasooria, 2005) and for predicting high school students' probabilities of success in universities (McDonald, 2004).

NEED OF THE STUDY

Data collection, analysis and management in the education sector in all education is problematic and non-standardized. Secondary and Tertiary institutions of learning manage their data and there is no regulatory form of sharing this data with other stakeholders in the industry. This leads to various agencies and bodies collecting and analysing their own data to meet their unique requirements. The resultant effect is a lot of data redundancy across the industry with minimal efficiency and non-optimization of its use.

Learning Analytics (LA) and Educational Data Mining (EDM) have provided significant results only in quantitative research and not in qualitative research. There is no doubting the availability of Big Data in the educational sector and with the Data Analytics and Data Mining successes in the business sector, there is no empirical qualitative evidence of its success or otherwise in the Education Sector. The tools and resultant information processing and management techniques and procedures, relevant for achieving overall business goals and objectives, are relevant also for educational providers, managers and other stakeholders to enhance efficacy and efficiency of learning management and delivery.

This research aims to provide a standardized framework/model for data collection and analysis on Educational Big Data in education organization by exploring LA and EDM methods and techniques and determining how they can be employed particularly in prediction of Students Academic Performance.

PREDICTIVE ANALYTICS PROCESS

Predictive analytics Process involves the following model which shown in figure-1

- 1. Understanding The data:** The first step is to identify the outcome of the project, the deliverables, business objectives, and based on which the data collection will be poised.
- 2. Data Collection:** The next step is to collect data from multiple sources, to have a picture of the various customer interactions as a single view item.

3. Analysis: Further, the data is inspected, cleansed, transformed, and modelled to discover if it provides useful information and helps to conclude.

4. Statistics: This enables to validate if the findings, assumptions, and hypothesis are admirable to go ahead and test them using a statistical model.

5. Modelling: It helps in creating an error-free predictive model about the future that provides options to choose the best option that can be sorted through multi-model evaluation.

6. Deployment: Predictive model deployment provides an option to create and deploy the analytics results into productive decision-making. It also helps to generate results, reports, and other metrics.

7. Monitoring: Models that are prepared are further tracked to control and check for performance conformance to ensure that the desired results are acquired as expected.

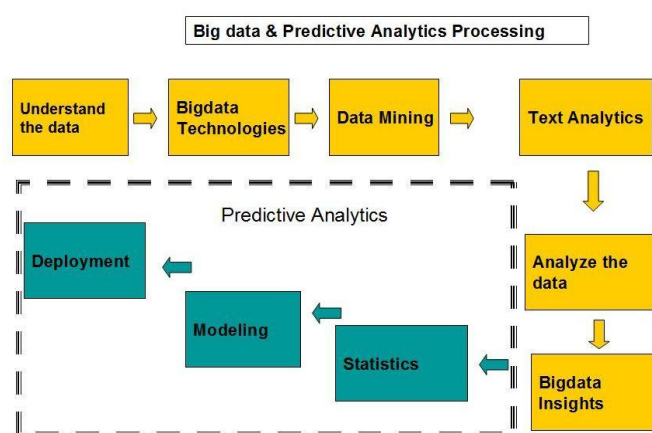


Fig-1: Predictive analytics Process

Predictive analytics is the branch of the advanced **analytics** which is used to make predictions about unknown future events. **Predictive analytics** uses many techniques from **data mining**, **statistics**, **modelling**, **machine learning**, and **artificial intelligence** to analyse current **data** to make predictions about future.

OBJECTIVE

The primary objective of this study is to provide a standardized framework/model for data collection and analysis on Educational Big Data in all schools to enable Learning Providers and Admin predict Students' Academic Performances.

The secondary objectives are as follows:

- To explore how LA and EDM in Educational Big Data can impact Knowledge Learning and Delivery in all education organization.
- To investigate whether we can get significant results in using qualitative research methods in LA/EDM
- To contribute to knowledge by investigating the potential possibilities of combining LA/EDM with GBL or mLearning in positively enhancing the overall learning experience.
- The main objective is to design and develop a Big Data Analytical Framework for use in the educational settings. This study is two folded, with the first phase focusing on constructing the conceptual framework for Big Data Analytics and the subsequent phase focusing on developing and testing the prototype.

PROPOSED SYSTEM

The underlying structure of the proposed framework mainly revolves around the stages of input, process and output (IPO) modelled after Garriss et al, (2002). Hence, the identified components were grouped into four major stages for the new framework.

The four major stages identified are data acquisition, data processing, data mining and data display and is termed as **CoProMinD** (Collecting, Processing, Mining and Displaying results). These four stages form the major pillars for the proposed framework.

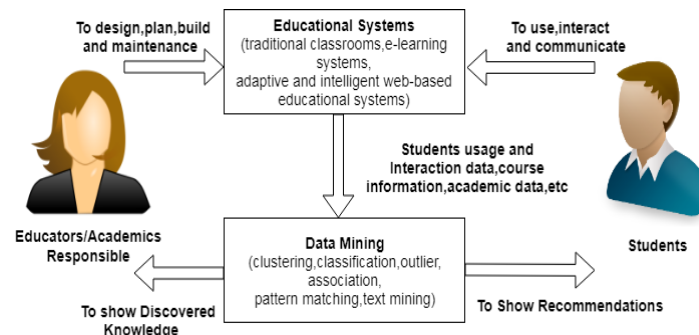


Fig-2: Proposed Framework

The Collection refers to the activities of acquiring data by identifying data, planning the acquisition, transporting and securing while in transit. Meanwhile, Processing responsible for whole lot of pre-processing task. In Mining (mine), the actual data analytics takes place by producing predictive models using appropriate algorithms. Finally, Display refers to visualization and the various reporting formats to show the end-result of the analytics. The placement of the components will follow the structure of CoProMind where the flow will start from Collecting and ends with Displaying as per Figure-2. Those components identified earlier will be placed in the CoProMind structure.

METHODOLOGY

A. Educational Data Mining

EDM is concerned with the application of data mining techniques on educational data with the goal of addressing educational challenges and discovering hidden insights in data. Data may include mining student demographic data and navigation behaviour within a learning environment, learning activities data such as quizzes, interactive class exercises/activities, as well as data from a group of students working together in an exercise, text chat forum, teacher data, administrative data, demographic data, and emotional data. EDM can be employed to access student-learning outcomes, enhance learning processes and supervise student learning to give feedback. Data can also be used to offer recommendations to suit the learning behaviour of students based on individuals, evaluation of learning design as well as the discovery of irregular learning behaviours. For instance, Ayesha, et al. reported on how the learning activities of students were predicted with the application of k-means clustering algorithm. Pal employed machine-learning algorithm to determine fresh engineering undergraduates that were anticipated to drop out in their initial year. Parack, et al. applied various data mining algorithms to carry out student profiling to categorise them given their academic records that include practical test scores, quiz scores, exam scores and assessment grades.

This study adapted the Design Science Research Methodology (DSRM) by (Peffers, Tuunanen, Rothenberger & Chatterjee, 2007) which has become a distinct line of research paradigm within the IS field. The DSRM method was employed to guide the research directions and to answer the research objectives and questions that were formulated. The core research activities of the design and development of the proposed framework and the prototype was based on a combination of “existing theory and prior research” and “exploratory research” (Maxwell, 2012). This combination makes up the basis or foundation of the new proposed framework. The

existing theory or prior research provide insights into the current practices and research gaps while exploratory method provided avenue for possibilities of new findings. In depth analysis of related work was done through extensive systematic and narrative literature review. Comparative analysis was carried out to discover and comprehend existing findings and gather knowledge on the area of the study. The SP Theory of Intelligence and Bounded Rational Theory has become the theoretical basis for the development of the framework.

The Big Data community has focused largely on the use of analytics to discover unpredicted, novel, unforeseen, or unidentified circumstances and report back to the stakeholders as the analytic output (Szymczak, Zelik, & Elm, 2014). Similarly, educational agencies can use this data driven decision making method to improve institutional functions, spot trends and directions, create better learning opportunities, and predict student performance and the performance of the organization.

In embracing greater integration of ICT to enhance the effectiveness of education and training programs, many initiatives were deployed by the Ministry of Education. The Frog- VLE through 1-BestariNet, is perceived as a tool to revolutionize learning, to produce richer curricula, to enhance pedagogies, to lead to more effective organizational structures in schools and to produce stronger links between schools and society to empower learners (Sua, 2012). The Frog-VLE is the world's first nationwide deployment of school in the cloud, connecting all its schools on a single learning platform. Frog-VLE provides virtual access to classes, lesson content, homework, assessments, grades and other external resources. There is also a social component, which enables pupils and teachers to interact in threaded discussions or chat. The connectivity established through FROG-VLE between students, teachers, parents and school administration generates huge volume of data that will indeed be of great value to whole education system.

Moreover, sub divisions under the MOE have been tasked to develop and maintain various databases and manage remotely data related to schools, students and teachers. There are almost four hundred over databases that have been developed, managed and maintained separately by the respective divisions. These databases are often used by the relevant authorities to channel information to policy makers and stakeholders as and when the need arise. Substantially Couldry & Powell (2014) claimed that the actual process of data gathering, data processing and organizational adjustment associated with Big Data narratives constitute important facts which all stakeholders must deal with. It is critical for stakeholders to figure out how to capture, store, and analyse the data correctly in order to gain insights and to use the right information in the organization to accelerate institutional functions accurately. The proliferation of data across the databases makes it critical to integrate and manage these diverse data assets and leverage the power of insights from an integrated view. Big Data Analytics can be considered as a potential solution to orchestrate all these various databases to a single integrated platform.

B. Framework Development

The proposed framework is the culmination of various recommendations and research gap found during the extensive and in-depth reading. In developing the framework, this study drew on research in the big data, educational data mining, pedagogical related fields, Malaysian school's database systems, interviews with key stakeholders in Education Ministry of schools and practitioners. Systematic Literature Review (SLR) provided the related general big data educational frameworks. All together 6 Big Data Analytical frameworks were reviewed to identify and gather information on the key components of the framework. Comparing the components of the chosen 6 frameworks for big data analytics, it can be seen that the frameworks share some

fundamental components or constructs. The components are retained or combined if they perform similar tasks. New components added to fill the gap to produce more polished framework. A total of 33 framework components from the 6 frameworks were identified.

C. Grouping of Components

The 33 components found from the review are grouped to newly consolidated groups forming part of the new framework proposed. The components that are logically related reduced and merged into nine distinguished components to represent the essence of details in each group. The new groups' names either use the existing names from any of the framework or a new name is given. Table 1 shows the grouping of components and the new names coined from the consolidation.

USED TECHNOLOGY

Mongo DB is an open source document database and leading NoSQL database. MongoDB is written in C++. MongoDB is a cross-platform, document-oriented database that provides, high performance, high availability, and easy scalability. MongoDB works on concept of collection and document. Database is a physical container for collections. Each database gets its own set of files on the file system. A single MongoDB server typically has multiple databases. Collection is a group of MongoDB documents. It is the equivalent of an RDBMS table. A collection exists within a single database. Collections do not enforce a schema. Documents within a collection can have different fields. Typically, all documents in a collection are of similar or related purpose.

Schema less MongoDB is a document database in which one collection holds different documents. Number of fields, content and size of the document can differ from one document to another. MongoDB supports dynamic queries on documents using a document-based query language that's nearly as powerful as SQL.

Data collection, analysis and management in the education sector in all education is problematic and non-standardized. Secondary and Tertiary institutions of learning manage their data and there is no regulatory form of sharing this data with other stakeholders in the industry. This leads to various agencies and bodies collecting and analysing their own data to meet their unique requirements. The resultant effect is a lot of data redundancy across the industry with minimal efficiency and non-optimization of its use.

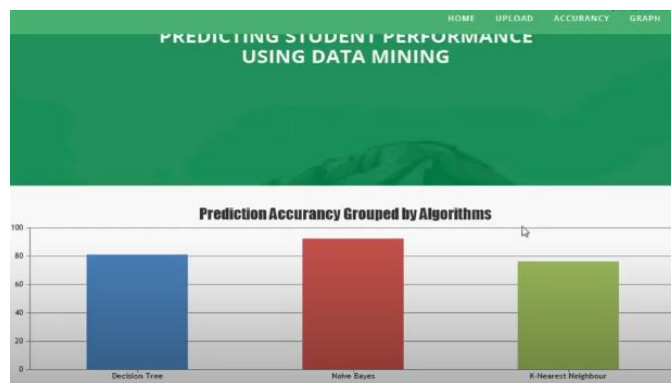
Learning Analytics (LA) and Educational Data Mining (EDM) have provided significant results only in quantitative research and not in qualitative research. There is no doubting the availability of Big Data in the educational sector and with the Data Analytics and Data Mining successes in the business sector, there is no empirical qualitative evidence of its success or otherwise in the Education Sector. The tools and resultant information processing and management techniques and procedures, relevant for achieving overall business goals and objectives, are relevant also for educational providers, managers and other stakeholders to enhance efficacy and efficiency of learning management and delivery.

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ANALYSIS

Comparison of Algorithms for Student Performance Prediction:

The below screen shows a comparison of 3 different algorithms that are used to predict the student performance. It can be observed that Naïve Bayesian algorithm can predict the student performance with 85% accuracy.



We have modified the NB and defining valid rules which improves the accuracy as compared to other algorithm

CONCLUSION

Educational data mining techniques are used to predict student performance at a very early stage due to the consideration of important factors such as student background and involvement of student in social activities. This helps the at-risk students at a very early stage and gives them scope to improve their performance. The teachers can also prepare early and come up with new techniques in teaching the topic. In future, unsupervised machine learning algorithms and data mining techniques could be applied to discover the relationship and impact up the attributes in clusters. This attribute analysis and feature selection would help in building more accurate models to predict the student performance

REFERENCE

1. Koedinger, K., Cunningham, K., Skogsholm A., Leber, B. (2008), "An open repository and analysis tools for fine-grained, longitudinal learner data", In 1st International Conference on Educational Data Mining, Montreal, 157-166.
2. Baker, R. Yacef, K. (2009), "The State of Educational Data Mining in 2009: A Review and Future Visions" Journal of Educational Data Mining (JEDM), 1(1), 3–17.
3. Cetintas, A., Si, L., Xin, Y.P., Hord, C. (2009), "Predicting correctness of problem solving from low-level log data in intelligent tutoring systems" In International Conference on Educational Data Mining, Cordoba, Spain, 230- 238.
4. Baker, R. S. J. D. (2010), "Data mining for education. International encyclopedia of education" B. McGaw, P. Peterson, and E. Baker, Eds., 3rd ed. Oxford, U.K.: Elsevier, 7, 112-118.
5. Kleesuan, S., Mitatha, S., Yupapin, P. P., Piyatamrong, B. (2010), " Business Intelligence in Thailand Higher Educational Resources Management" Procedia-Social and Behavioral Sciences, 2(1), 84-87.
6. Espejo, P., Ventura, S., Herrera, F. (2010) "A Survey on the Application of Genetic Programming to Classification" IEEE Transactions on Systems, Man, and Cybernetics-Part C. 40, 2, 121-144.
7. Arsad, P. M., Buniyamin, N., Ab Manan, J. L., & Hamzah, N. (2011), "Proposed academic students' performance prediction model: A Malaysian case study" , In Engineering Education (ICEED), 2011 3rd International Congress on (pp. 90-94). IEEE.

8. Connolly, T. M., Boyle, E. A., MacArthur, E., Hainey, T., Boyle, J. M. (2012), "A systematic literature review of empirical evidence on computer games and serious games" Computers Education, 59(2), 661-686.
9. Aziz, A. A., Ismail, N. H., Ahmad, F. (2013), "Mining Students & Academic Performance. Journal of Theoretical & Applied Information Technology, 53(3).
10. Papamitsiou, Z., & Economides, A. (2014), "Learning Analytics and Educational Data Mining in Practice: A Systematic Literature Review of Empirical Evidence" Educational Technology Society, 17 (4), 49-64.
11. Sin, K., Muthu, L. (2015), "Application of Big Data in Education Data Mining and Learning Analytics-A Literature Review", ICTACT Journal on soft computing, 5(4).
12. Khan, S., Shakil, K. A., Alam, M. (2016), "Educational Intelligence: Applying Cloud-based Big Data Analytics to the Indian Education Sector" Proceedings of International Conference on Contemporary Computing and Informatics 2016 (IC3I 2016).
13. Singh, R. and Pal, S., 2021, "A Critical Review on Educational Data Mining Segment: A New Perspective" Data Intelligence and Cognitive Informatics, pp.341-347.
14. Shetu, S.F., Saifuzzaman, M., Moon, N.N., Sultana, S. and Yousuf, R., 2021 "Student's Performance Prediction Using Data Mining Technique Depending on Overall Academic Status and Environmental Attributes" In International Conference on Innovative Computing and Communications (pp. 757-769). Springer, Singapore.
15. Khan, A. and Ghosh, S.K., 2020, "Student performance analysis and prediction in classroom learning: A review of educational data mining studies", Education and Information Technologies, pp.1-36.
16. Salloum, S.A., Alshurideh, M., Elnagar, A. and Shaalan, K., 2020, April, "Mining in educational data: review and future directions", In Joint European-US Workshop on Applications of Invariance in Computer Vision (pp. 92-102). Springer, Cham.
17. Sunday, K., Ocheja, P., Hussain, S., Oyeler, S., Samson, B. and Agbo, F., 2020 "Analyzing student performance in programming education using classification techniques", International Journal of Emerging Technologies in Learning (iJET), 15(2), pp.127-144.
18. Kunjumon, L.T., Shaji, S., Saji, S.T., Naushad, T. and Joseph, N., 2019, "An Intelligent System to predict Students academic performance using Data Mining", International Journal of Information, 8(2).
19. Sharma, P. and Sharma, S., 2018, "Data mining techniques for educational data: A review", International Journal of Engineering Technologies and Management Research, 5(2), pp.166-177.

PROBLEMATIC FEATURES IN THE TRANSLATION OF UZBEK TERMS INTO ENGLISH

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ABSTRACT

Globalization, intensification of international integration, and the development of intercultural communication presuppose the advancement of the theory and practice of translation as a science. The ideas and thoughts about the fact that “though people of the world speak different languages, the laws that determine the way they think are the same” that were suggested in the last century require a new interpretation and new comments. This is true, because according to the conceptual interpretation of the knowledge making up the basis of the notion as the unit of cognition the success achieved show that the concept, which is the quantum of cognition, has a national nature. Therefore, in translation, following the integrity of the chain “reality-concept-notion-meaning” provides the adequacy and specificity of translation and interpretation. Prepositions are considered to be the elements whose denotative (referential), grammatical, stylistic, and pragmatic meanings must be taken into account when translating. The meaning of prepositional constructions in the English language can be translated into Uzbek by various means. Those include constructions with auxiliary words, case endings, notional words, and the text.

Keywords: *prepositions, auxiliary words, interpretation, translatology, theory of translation, case endings, methods of analysis, meaning, content, adequacy, equivalent.*

As the process of translation is expanded and versatile, the features it has are characterized with the synthesized nature. Because the methods and methodologies used in this process, which expresses in itself the qualities belonging to such spheres as logics and literature, language and psychology, spirituality and history, faith and culture, are also characterized with their complexity. They must serve to provide similarity by preserving the originality of the content, form, logics, and artistry of the source. For instance, translation theoretician L.S. Barkhudarov enumerates the following analysis methods peculiar to the theory of translation: 1)Comparative method; 2)Method of dividing into constituents; 3)Transformational method; 4)Statistic method; 5)Method of opposition [Barkhudarov, 1975, 22]. This list of methods cannot be considered to be complete as it is very difficult to find two researchers who would limit the list only with the above mentioned names. This is due to the fact that translation is not only complex and multisided phenomenon, but also, it is conducted on the point of intersection between various sciences and spheres. Translatologist V.N. Komissarov states that “translatology” enters into close relations with specific sciences. Without following the rules of such sciences as comparative linguistics, general linguistics, textology, typology, sociolinguistics, psycholinguistics, variantology, literature studies, cybernetics, informatics, history, medicine, physics, chemistry, astronomy, and others, it is impossible to perform a perfect translation [Komissarov, 1973, 36]. Currently, such types of both applied and theoretical translatology as literary translatology, psychological translatology, ethnographic translatology, historical translatology, and linguistic translatology are differentiated and rapidly developing. Linguistic translatology, one side of this complexity, disputes on the principles of preserving meaning adequacy when rendering the meanings of linguistic phenomena, and it is a leading one among the branches of translation. Regardless of the manner, the purpose of translation, what and in which branch we are translating, there are two elements in the basics of translation – the meaning and content. Translators and translatoologists differ in which

of those two elements they prioritize – meaning or content. However, prioritizing one of them does not always give the expected results. For example, in the cases when coming across with the units that are impossible to translate (realia, idiomatic constructions), it is required to prioritize the content, the artistry and expressiveness are subordinated by the target language means. For example, when rendering into another, unrelated language such Russian lexemes as *okroshka*, *bulochka*, *pechka*, Uzbek lexemes as *chuchvara*, *manti*, *sandal*, *suri*, *mahsi*, *to'n*, and English lexemes as *dozen*, *mile*, *football*, *machine*, *meter*, *pound*, *sterling*, *pudding*, *dressing* will definitely lead to a certain degree of the content loss. But it is such cases that require language skills and knowledge from the translator. The same thing is observed in grammatical phenomena as well. This is true because grammatical rules and meanings, peculiarities and qualities provide specificity of every single language. For example such Uzbek language units as *mahsi*, *go'ja*, *sumalak*, can be rendered into another language using explanation. But such sentences in the Uzbek language as “O'zlari ham kelibdilar-da!” that contains ironic-allegorical meaning is impossible to translate adequately. In order to do it, the translator must give a deeper insight into the target language possibilities and try to find the expression that would adequately render the same content, which means, the translator must ‘toil’. In other words, the translator must feel the spirit of the language. Knowing if it would be right when translating such Uzbek word combinations as *xazrat Navoiy*, *Navoiy xazratlari*, *ulug' shaxanshoh*, *shaxanshohimiz*, *xon xazratlari* into English to use his Greatness *Alisher Navoi*, his Highness the King, his Honour the King, your Honour, into Russian to use *его величество шаханшах*, *его высочество хан*, depends on the feeling the historical spirit of the language. We think that it we need not explain why translating the following expressions from Uzbek into other non-related language is difficult because any slightest change can cause the change of its meaning: 1. *Onang qoqindiq, kela qol!* 2. *Qo'ling urgilsin osh bo'libdimi?* 3. *Bubing aylansin, bormisan o'zi?* 4. *O'zom girgirtan bo'lay!* Maybe we can use such expressions as *my sweet*, *sweetheart*, *sugar*, *honey*, *dearest* to translate them, but this, in our view, will be a simple translation, and the approach that the translator uses would seem just as backing out of the situation. These multiple cases prove the fact that languages are national-ethnic psychological phenomenon. Sometimes, it is impossible to render just a dialectal element into a literary language. Therefore, as S.Vlakhov and S.Florin stated: “... we can become convinced that a single language is unique by approaching an untranslatable phenomena” [Vlakhov & Florin, 1980,48]. Linguistic meaning and linguistic content are different notions, meaning belongs to a language unit, content to a text. The category of meaning is contemporary of linguistics. In translatology the following types of the meaning are observed: – Denotational (referential) meaning; – Grammatical meaning; – Stylistic meaning; – Pragmatic meaning; – Paralinguistic meaning. The first two types of meaning are directly connected to the language means, while the others are considered to be the acquired meanings connected with speech characteristics. Grammatical meaning is expressed by means of grammemes, which are the conjoining meanings that provide the construction of the text. Without them language expressions cannot be united. There are the following types of means expressing grammatical meaning in the language: – grammatical affixes; – auxiliary words; – word order; – repetition; – intonation. Prepositions, the object of our analysis, are the units that reflect the substantial potential of the English language and express specific grammatical meaning. Due to the fact that prepositions are adequate means for auxiliary words in Uzbek, and Uzbek auxiliary words are equal to cases both in the meaning and function, proportionality and disproportionality between them plays an important role when translating prepositions. Generally, synonymy of

cases and auxiliary words in the Uzbek language is one of the possibilities of the Uzbek language to render the meanings of prepositions.

REFERENCES

1. Austin J. Pride and Prejudice. (2011). Oxford:Macmillan Education.340.
2. Barkhudarov L.S. (1975). Yazik i perevod (Language and translation). Moscow: Visshaya shkola. 147.
[2]
3. Komissarov V.N. (1973).Word translation. Moscow: Prosvesheniye. 145.
4. Ostin J. (2014). Andisha va g'urur (Pride and prejudice). Tashkent: Yangi asr avlodi.401.
5. Vlahov S., Florin S. (1980). Neperevodimoye v perevode (Untranslatable words in translation). Moscow: Nauka.130.



HOW TO MAKE READING LESSONS MORE INTERESTING?

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ABSTRACT

This article deals with the implementation and benefits of using pre-, while and post reading activities in language learning. Reading is an integral part of learning, but it's not something that all kids enjoy. For this reason, many teachers are stuck wondering how they can make it more attractive to students. There are many reading strategies that you can integrate into your classroom to do this. When you implement new strategies, reading comprehension improves and everyone benefits.

Key words: *reading strategies, a pre-reading stage, a while-reading stage, a post-reading stage, and activities.*

Whether the kids in your ESL class enjoy reading or it is the class they most dread, you can inspire them and give them a love for reading, and it is easier than you think.

Reading is the most important activity in any language class. A person may read in order to gain information or verify existing knowledge, or in order to critique a writer's ideas or writing style. A person may also read for enjoyment, or to enhance knowledge of the language being read. Reading is not only a source of information and pleasurable activity, but also an essential part of language instruction at every level because it supports learning in multiple ways: Reading to learn the language: Reading material is language input. By giving students a variety of materials to read, teachers provide multiple opportunities for students to absorb vocabulary, grammar, sentence structure, and discourse structure as they occur in authentic contexts. Reading for content information: Students' purpose for reading in their native language is often to obtain information about a subject they are studying and it gives students both authentic reading material and an authentic purpose for reading. Reading for cultural knowledge and awareness: Reading everyday materials that are designed for native speakers can give students insight into the lifestyles and world-views of the people whose language they are studying. Strategic approaches to foreign language reading include different kinds of reading activities, such as using titles and illustrations to understand a passage, skimming for an overview, scanning for specific information, guessing or predicting meaning, applying background knowledge about the text's genre and context, etc. Of course these activities vary according to the phase, approach and specific aims of the lesson, and they are both staged and sequenced to help students develop reading skills. Awareness of those reading strategies that help learners understand the text is essential for reading success. Generally, a reading lesson has three major stages: a pre-reading stage; a while-reading stage and a post-reading stage.

Pre-reading stage — by pre-reading activities, we mean tasks/activities that students do before they read the text in detail. The purpose of this stage is to facilitate while-reading activities. Garner calls this stage of reading Lead in, where the students and teacher prepare themselves for the tasks and familiarize themselves with the topic of the reading exercises.

Pre-reading activities contain: Predicting based on the title, Predicting based on vocabulary, Predicting based on the true or false questions, Skimming, Scanning, Eliciting word games, Word spider, Discussions, Brainstorming. While-reading stages- these include activities that a pupil engages in while reading the text and the purpose of these activities would be to enable pupils to achieve the lesson aims by handling the text in

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different ways. Reading discussion, answering the questions, Predicting what is next, Matching, Jigsaw reading, Reading puzzles, True/ False activities are while-reading activities.

Post-Reading Stage — the purposes of this stage are: to help students use their acquired knowledge in similar readings, to have them integrate their reading skills both with the other language skills: listening, speaking, writing and with the foreign culture, to make use of key words and structures to summarize the reading passage, to extract the main idea of a paragraph or a reading text and to interpret descriptions (outlining and summarizing). Useful and interesting activities of this stage are: Retelling, Reporting, Discussion, Writing a paragraph, Role play, Gap-filling, Summarizing. These activities provide the students with opportunities to relate what they have read to what they already know or what they feel. From my teaching experience I have noticed that in order to conduct the reading lessons effectively and improve your students' reading sub skills implementing pre-, while, and post stages is very pivotal. Here I want to give one of the lesson plans of my Reading class.

Lesson Plan

Group: 2nd year students of English Language Department.

Course: Reading.

Topic: Environment. Duration: 80 minutes.

Materials: teacher created Power Point slides, hand- outs, posters, projector.

The aim: to increase students reading and speaking skills with the help of pre, while, post activities. Lesson objectives:

To raise students' reading and critical thinking skills through communicative activities, to brush up students' vocabulary, to practise scanning, skimming, predicting.

Interaction: individual, group work and plenary — learner-centered class.

The Procedure of the lesson I.

Warm up a) Teacher held a warm up session, in order to motivate the students and focus their attention to the topic she showed a poster with different pictures. Looking at the pictures students should logically think and guess the topic of the lesson.

b) Teacher asked brainstorming questions about the topic and discussion was held

II. Pre — reading stage:

a) Predicting based on the title. Teacher wrote the title of the text and asked students to predict what reading passage they were going to read was about

b) Guessing the meaning. Teacher showed the pictures of disasters and asked students to guess the meaning of these disasters.

III. While reading stage:

a) Scanning and Skimming. Teacher asked students to read the text and highlight the main ideas of the text, then to find specific pieces of information

b) Matching. Students were asked to match text captions to pictures and to elicit the main points of each paragraph in a text.

c) Jigsaw. Students were asked to fit headings and sub- headings into a text from which they had been removed

d) True/False/Not Given. Students read the statements and decide whether statements were related to the content of the text or not.

IV. Post reading stage:

a) Retelling. Students were asked to retell the meaning of the text.

b) Reporting Role play. Teacher asked 1 student to be a journalist and take interviews from his classmates about the environment.

c) Summarizing. Students summarized the topic and filled T-chart-table.

Homework: Writing a paragraph about Environmental problems. During the class reading was integrated with both speaking and writing. While doing reading activities students were highly motivated, participated in pair work and group works and enjoyed doing different tasks. In Conclusion I want to say that reading is an excellent way for students to make progress in language learning and implementing different pre-, while, post reading activities not only practical to integrate the other skills, but also very beneficial and effective way of developing students reading and understanding comprehension.

REFERENCES

1. David Nunan. Language teaching methodology. A textbook for teachers
2. Exploring second language reading: Issues and strategies. Boston.2003.
3. Fry E.B. Skimming and Scanning. Middle level. Jamestown Publishers..
4. Ivana Trajonoska. Developing Students Reading skills.
5. Marianne Celce-Murcia ,Donna M.Brinton, Marguerite Ann Snow”Teaching Englis as a Second or Foreign Language”.

ELIMINATION OF BLACK MELL DISEASE IN SURKHANDARYA CLIMATE AND MEASURES

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ANNOTATION

The *Ustilaginales* order of the fungal world or black moth fungi, is important in phytopathology and causes many diseases in plants. In the dicarotic phase of the developmental cycle in nature, these fungi are obligate parasites of flowering higher plants. Blackhead infections are often local, but can be systemic. Manifestations and effects of species that pose a serious threat to agricultural crops. Development cycles of fungi that cause hard and powdery mildew in wheat and agro-technical measures in control.

Keywords: *Karakuya: powdery and hard karakuya cereals, spores-chladamispora, vegetation, seeds, fungicides.*

It has a significant impact on productivity, especially in tropical and subtropical countries. The so-called black moth disease is the formation of powdery spores (teliospores) in plant tissues, resembling the remains of a fire. Various parts of plants-the stems of leaves, sometimes even the roots- are damaged, but blackberries are usually affected by the reproductive organs (flowers, spikes) of many plant species. Some are perennial (chronic) infections in some host plants, wintering in pathogenic plant tissues and in the spring the newly grown plant is already damaged. Plant such as wheat, barley, millet blackberries (*Tilletia ustilages*), corn bubbles (*Ustilago maydis*) and oat powdery mildew (*U.avenae*) are diseased, yields are reduced and product quality deteriorates sharply. The prevalence of this disease, which has a serious impact on yields, under moderate conditions, requires the introduction of important agro-technical measures to combat the proliferation of chladospores of the fungus in soil structures over the years. An important feature of an infected plant is that it darkens as a result of damage by fungal spores instead of grain after the cluster has matured. These pollens are the perennial chladaminospores of the black moth, which are spread by infected seeds. Diseases are divided into 4 groups according to their origin:

1. Infection of the seed as a result of infection by fungal spores. The surface of such seeds is damaged by chlamydospores of the black moth fungus during seed collection, cleaning, storage and transportation. These factors play a key role in the overall damage to wheat.
2. These factors play a key role in the overall damage to wheat. In powdery mildew of wheat and barley, the colorless mycelium of the fungus is infected inside the seed by chlamydospores that fall during the flowering period of the plant.
3. During the growing season (from sowing to ripening), bubble black moth disease of corn and millet is caused by wind-borne spores.
4. The source of infection in wheatgrass is chlamydospores, which remain in the soil 4 years and infect grasses during seed germination.

In general, black moth disease is divided into severe black moth and powdery mildew according to the origin and manifestation, internal and external symptoms. In severe black moth disease, the epidermis of the seed is damaged and the seed coat remains intact. The inside of the seed coat is filled with

chlamydial spores of the fungus. The disease completely contagious. Rapture of the seed coat causes wind damage to all field plants. Such factors can lead to complete loss of yield. The causative agent of powdery mildew is *Ustilago tritici* Jens a type of fungus that produces mycelium and spores throughout its life and is manifested during the formation and flowering by the process of wind-infected plants attaching to the flowers of healthy ones and entering the seed pods to the nodes. The appearance of wheat grains is not different from that of healthy grains, the seed coat contains mycelia hyphae of dust mites. The temperature should be 20-25 degrees and the humidity should be above 50%. Under such conditions, the spores spread rapidly.

From an economic point of view, this is a very important procedure, as blackberries cause great damage to valuable agricultural crops and ornamental crops. Many common species of blackberries cause the loss of much of the grain crop that provides food for most people in the world. In a field heavily infested with hard blackberries the dust of teliospores rising into the air while harvesting with a combine can explode under the influence of sparks emitted by agricultural machinery. In addition, teliospores are allergenic and their powders can cause allergies in workers. The duration of cold days, the availability of effective temperatures, the presence of artificial irrigation in dry and hot summers and in many cases the presence of sufficient soil moisture conditions lead to the spread of black moth disease. Complex measures are important in the fight against it. Seeds should be obtained from a healthy plant and stored in good conditions for normal growth of crops and increase their resistance. Regular monitoring of the level of disease in the fields, sowing the seeds in soil-friendly environmental conditions will reduce the damage. It is important to follow the data collected as a result of regular inspections. As a result of the control it is strictly forbidden to harvest seeds from more than 2-5% of diseased fields. It is also important to pay attention to the distance between crops and crop rotation. Because the next crop should not be involved in the development of the fungus. Proper fertilization and microorganisms also need to be managed properly. Black moth seeds are easily controlled with medicinal fungicides. Some fungicides are also effective against smallpox, but due to the availability of highly resistant varieties, the chemical method against this pathogen is not widely used in the US. Timely adherence to all agrotechnical measures and strengthening control over them is an important and urgent task in the elimination of black moth.

LITERATURE

1. A.Sh.Sheraliyev, U.H.Rahimov "O'simliklar fitopatologiyasi". Toshkent-2014.
2. Z.Umarov, H.N.Atabayeva "Modern technology of cultivation of field crops". Toshkent-2003.
3. B.A.Sulaymonov, B.M.Xoliqov "Mo'tadil iqlim sharoitida yuqori hosil olishda agrotexnik tadbirlar bo'yicha tavsiyalar". Toshkent-2016.
4. Sh.Beshimova, L.Salimova. "O'simlik mahsulotlari yetishtirish texnologiyasi va ekologiya". "O'zbekiston" nashriyoti. Toshkent-1994.
5. H.Ch.Bo'riyev, Z.A.Abdukarimov, S.Y.Islomov "Seleksiya, urug'chilik va urug'shunolik". Toshkent-2010.
6. T.Uraimov, E.Ochilov, Z.Jumaboyev. "Dehqonchilik va ilmiy izlanish asoslari". Toshkent "Navro'z nashriyoti" 2014.

THE CONCEPT OF DISCOURSE IN ENGLISH AND UZBEK AND ITS COMPARATIVE STUDY.

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ABSTRACT

Thus, the goal of the research is to investigate grammar of the English language in comparison with the Uzbek, to investigate phonetics, in comparison English with Uzbek.

The novelty is that this work contains the comparative analyses of the English grammar, phonetics and construction of the sentence. The student made her own investigation finding many examples of comparison not only in English, and in Uzbek.

Key words: *typology, Non-linguistic, linguistic, Comparative method, language.*

The word typology consists of two Greek morphemes: a) typos means type and b) logos means science or word. Typology is a branch of science which is typical to all sciences without any exception. In this respect their typological method is not limited with the sphere of one science. It has a universal rise. So typology may be divided into:

1. Non-linguistic and
2. Linguistic typology

Non-linguistic typology is the subject matter of the sciences except linguistics.

Linguistic typology is a new branch of general linguistic which studies the systems of languages comparatively, also finds common laws of languages and establishes differences and similarities between them.

Typological classification of languages.

In linguistics we may come across many terms as to the terminological nature of linguistic typology.

The are: 1. Comparative methods, 2. Comparative – historical method, 3. Comparative (or contrastive) linguistics, 4. Comparative typology, 5. Comparative grammar, 6. Connotation grammar, 7. Descriptive – comparative linguistics and on the terms used in Russian and Uzbek are not exact either. Classification of linguistic typology.

According to the notion of comparison of linguistics phenomenon and the aim directed on we may classify linguistic typology into the following parts a) genetic of genealogical typology, b) structural typology, c) areal typology and d) comparative typology.

Genealogical typology is a branch of linguistic typology which studies the similarities and the relationship between the related languages. It is applicated to the systems of genetically related languages. Genealogical typology developed from the comparative – historical linguistics dominated during the 19th century in Europe. It's origin was stimulated by the discovery of Sanskrit, the ancient classical language of India. The discovery of Sanskrit disclosed the possibility of a comparative study of languages. The concept of relative languages was confirmed by the existence in India of a sister of the familiar languages of Europe e.g. Sanskrit «mata» means «mother», in the accuse case «matarum»

Dvau-two

Trayah – three

As ti-he is etc.

Before the discovery of Sanskrit European linguistics possessed very vague similarities for the current grammars built on the Greek model. They didn't set clearly the features of each languages. It is worth to mention that at the same time Sanskrit discovery gave rise to confuse notions of linguistic relation which lived for a brief time that European languages were derived from Sanskrit. But this opinion gave way to a correct explanation, namely Sanskrit, Latin, Greek, and other were later forms of one prehistorically language.

Comparatives gave two kinds of classification of languages – genealogical and morphological.

Genealogical classification deals with the family relationship of languages which descend from one common ancestor. It distributes languages into different families.

Morphological classification deals with the classification of languages according to their structural features instead of a genealogical origin.

According to the morphological classification the languages are divided into:

Isolating (Chinese; Vietnamese; Japan; etc.)

Analytic (Russian; English; German; etc.)

Agglutinative (Turkish languages) and other.

Genetic Typology compares the systems of languages in two ways: diachronically and synchronically. But in the second case genetic relationship is not taken into consideration.

Structural linguistic typology can be understood as a systematization of linguistic phenomenon from different languages according to their specific structural features.

Structural typology research makes it possible to establish some traits are **universal, unique, and special**.

Language Universals.

The notion of language universals is closely connected with the process of unification of linguistic facts with a process of establishing common features between the systems of different languages.

With the process of generalization of linguistic phenomenon the investigations or language universals began at the end of 1950s. The main event in this field is the international conference held in April, 1961 in New-York.

REFERENCES

1. Modern English in Action, Henry I. Christ, DC Heath and company, Boston 2001.
2. English phonetic, A.A. Abduazizov издательство «Укитувчи» Т. 1972 г.
3. Improve your sentence, Ann M. Sala, McCraw-Hill, USA. 1999y
4. Language for daily use Mildred A Dawson New York, 2001y
5. New English voyages in English, Francis B. Connors, Loyola University. Press, Chicago 1991y
6. Writing skills, Suzanne Chance, Clencoe, McCraw-Hill. New York
7. Reading and writing, Natasha Haugnes
8. Contemporary English, Mechella Perrott, contemporary publisher group, Illinois USA.
9. Beginning English writing skills, Mone Scherago, National textbook company, Illinois USA.
10. Lectures of comparative typology, C. Satimov, М. Просвещению 1991 г.
11. Comparative typology V.D. Arakin, М. «Prosveshenie» 1991 Comparative grammar, J.I.

THE ROLE OF INTERACTIVE METHODOLOGICAL EDUCATION IN TEACHING UZBEK LANGUAGE TO FOREIGNERS

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ANNOTATION

As a representative of the study of the role of interactive methodological education in teaching Uzbek language to foreigners, I would like to touch upon an important theme and tell about the prospects of studying the Uzbek language abroad, tell in more detail about the methods and techniques used, programs and directions that are used on the way of learning this language at the National University of Uzbekistan, of which I am a student.

Key words: *interactive, methodological, foreigners, reverse analysis, acquired knowledge, effectiveness, pedagogy, e-learning system, skills and abilities.*

INTRODUCTION

Research on the use of interactive methods to improve the effectiveness of foreign language teaching in the global educational system within the framework of the Carl Wieman Science Education Initiative (CWSEI) (British Columbia), an interactive e-learning system to improve the effectiveness of lessons - study) on the use of Purdue University (USA) and JCM International Management Engineering Institute (China) and research on the implementation of interactive learning at leading universities in the world, such as the UN International Institute for Sustainable Development (IISD), institutes and research centers. It is important to develop skills and abilities to use modern educational models to increase the opportunities for teaching a second language in the field of pedagogy in our country.

Decree of the President of the Republic of Uzbekistan PF-6084 dated October 20, 2020 on the creation of programs for teaching Uzbek to foreigners, increasing the role and prestige of the state language in the international arena, the development of foreign cooperation and foreign cooperation. higher education A number of tasks have been set, such as providing Uzbek language courses in educational institutions with the necessary scientific, educational, methodological and artistic literature, increasing the volume of scientific research on the teaching of the Uzbek language.

We know that interest in learning the Uzbek language in foreign countries is growing. Experience has shown that citizens of South Korea, the USA, Germany, the Czech Republic, Japan and Turkey study Uzbek with great interest. It is necessary to further develop this process, increase the international prestige of the Uzbek language and develop interest in its study, increase the volume of research for the effective organization of this process. One of these areas is an interactive learning model that shows the best results in the world practice of teaching another language. Experience has shown that four basic learning models are widely used in education. These are extracurricular, active, interactive and interactive learning models. Interactive learning is a process of active communication and exchange of information between teachers and students, as well as between students. In this process, the active exchange of information between the participants is of a communicative nature. This is an important factor that helps students learn Uzbek to develop conversational skills.

This form of educational communication is important not only for students to express their personal views on the topic of learning or learning information - knowledge, but also for the implementation of information in practice.

As a rule, in the traditional model of education, we often observe that when a student describes his knowledge or experience, the teacher often has his own opinion and does not perceive it as serious educational information. Then he tries to retell the topic in his own way. The way of violates one of the rules of multifaceted communication - a teacher's opinion is a student's statement.

The student's life experience, including the experience of mastering the basics of the subject, is a very simple, insignificant tool for achieving a goal (the teacher's goal) that has not yet been fully realized. Students' knowledge of a particular subject, its subjective assessment and feedback serve as a "communication filter" that the teacher must understand and accept.

The organization of utilizing of an interactive learning model in teaching a foreign language confirms the validity of the following conclusions:

1. If students are given the opportunity to approach the study of a particular topic based on their own experience, the necessary knowledge, skills and competencies will be acquired to the required level;
2. If the teacher can actively support the learning tools of the students, they will receive a beneficial education;
3. If the teacher can, firstly, choose effective ways of acquiring knowledge based on the capabilities of the students, and secondly, if their opinions are taken into account, even if they do not correspond to their own views, the students will be very good at learning subjects.

The presence of an interactive process in teaching Uzbek to foreigners not only denies the "dominance" of the teacher, but also allows the student to assess their level of knowledge, identify strengths and weaknesses. Another advantage of the interactive process:

- expressing personal opinion to students;
- defend your point of view;
- develop the ability to listen to the opinions of others, generalize them, distinguish between the main, important and true, draw conclusions;
- Improving skills and competencies in the correct and effective use of interactive methods in the educational process. As a result, a skillful, artistic approach to the educational process and its organization in accordance with the needs is one of the most important conditions for the development of an ideal person.

In the process of learning the Uzbek language, each student has a unique idea about the topic being studied or acquired knowledge. On this basis, training tasks are performed to become successful. To what extent can a student's educational activity be based on personal experience of gaining knowledge or able to focus his personal experience on studying the material. There are a number of general principles that apply to all students attitudes toward topics and learning materials. They are:

1. Students master the subject by developing their individual understanding;
2. The learning process should enable the individual to demonstrate that he or she is able to assimilate and deepen knowledge by combining his or her previous and new knowledge. This opportunity helps the student to actively participate in the discussion process;
3. Knowledge is created under the influence of culture, past experiences and values formed by social actors, therefore diversity plays a key role in the emergence of mental activities;

4. Philosophical views confirm the expediency of the study of the problem in educational practice, organizing dialogue (conversation, discussions) and the use of activities aimed at assessing a particular situation or situation.

The task of the educational process in self-education is to master the instructional materials of the initial knowledge that is manifested in the personal experience of each student and to direct them towards communicative activity. American pedagogical scientist G. Johnson in his research work, analyzes how and to what extent this task can be effectively solved, proposing the theory of “steps of mastering knowledge in interaction”. It contained the following five main situations:

- 1) Organization of demonstration of existing knowledge in the initial position (minutes);
- 2) ensuring that existing knowledge becomes the basis for the acquisition of new knowledge;
- 3) assessment of the extent to which their views are justified on the basis of personal approach and Experience;
- 4) analysis of the acquired knowledge with an eye to each of the different points of view;
- 5) generalization (synthesis) of the judgments expressed so that they are equally understandable to everyone.

From the point of view of the legislation on the establishment of social relations, it is not enough for the student in the educational process to have his own personal opinion, to be able to explain his knowledge, to be able to protect his personal approaches. The most important thing is that he is able to live among social residents and master the skills of interacting with them. In our opinion, the most essential advantage of interactive education is to create the environment situation. Because the creation of conditions for free expression of the opinions of representatives of other nationalities, students on the subject, the organization of the process of mutual thinking, the sharing of their life experiences and the creation of an opportunity to base their opinions increase the opportunity to independently express their thoughts in the Uzbek language and, most importantly, to speak the Uzbek language.

The records reveal that in teaching a second language, the progress expected from each lesson must be aimed at cultivating students' capability to adopt their theoretical knowledge in practice, as well as developing their speaking and writing skills. This requires learners not only to impose the speech constructions they have studied, but also to confidently and creatively express their thoughts with the application in similar phrases. This supposes the combined application of the four basic activities in language learning: listening and understanding, reading, speaking, writing – it must be deployed during each lesson, considering a balanced distribution. And relevant video and audio materials plays major role in this practical assignment. The material that a student is able to simultaneously see, hear and comprehend during the process of learning is firmly fixed in his memory.

The indicator unveiling the degree of language acquisition is, firstly, estimated by how the student comprehends the speech he has heard, replicated in the language he is studying, and how he responds to it. For this reason, audio and video materials has been widely used in the study of foreign languages, and even teaching aids in the form of audio CDs and video materials are published. There are a number of researches that highlight the topic of video films and video files having texts attachments, developed for language learners, as well as on the use of video courses and films during an educational lesson. In teaching Uzbek as a second language, one of the significant factors in boosting the effectiveness of education is the use of audio and video materials. It is not a secret for anyone that the level of proficiency in the Uzbek language of Russian-speaking students in terms of verbal Uzbek speech is much lower than required, and in many cases their inability to correctly pronounce

specific sounds of the Uzbek language is not perceived as a glaring mistake. In this context audio material activities, and exercises, what are required to listen and understand create the opportunity to listen to the speech related to the target language and thus develop student's pronunciation. Moreover, videos serve to form not only speech among language learners, but also sociolinguistic and pragmatic competence. Broader acquaintance with events on various speech topics and situations through video materials enhance the vocabulary of students, plus creates conditions for them to independently express their thoughts on the basis of the viewed content.

To summarize, we may say that nowadays multimedia technologies are one of the interactive tool promising areas of digitalizing an educational process. The introduction of multimedia technologies in the educational process is a crucial chance for the intellectual development of students, along with the socio-economic development of our society. Apart, on this account, the century itself requires the teacher of today to be the owner of the merits necessary for his profession and specialty, as a person who is available effectively consume advanced pedagogical and multimedia technologies, as much as has an extraordinary creative mind and works tirelessly to cultivate own abilities.

REFERENCES

1. Jalolov J. Ingliz tili o'qitish metodikasi. –T.; O'qituvchi. 2012. 432-b.
2. Ona tili o'qitish metodikasi. Boshlang'ich ta'lim fakulteti talabalari uchun darslik: K. Qosimova, S.Matchonov, X. G'ulomova, Sh. Yo'ldosheva, Sh.Sariyev. –Toshkent, Noshir. 2009. 352 b.
3. Актуальные проблемы изучения и преподавания РКИ в вузе: современные тенденции билингвального образования: Материалы Междунар. научно-практ. конф. – Тверь: Твер. гос. ун-т, 2018 – 213 с.
4. Актуальные проблемы обучения иностранных студентов в современных условиях: Тезисы Всеукраинской научно-практической конференции ДонНУ (6 сентября 2013 г.). – Донецк: ООО «Цифровая типография», 2013. – 51 с.
5. Чеснокова, М.П. Методика преподавания русского языка как иностранного: учеб. пособие / М.П. Чеснокова. – 2 изд., перераб. – М.: МАДИ, 2015. – 132 с.
6. Avlakulov Yashnarbek, Associate Professor at UZSWLU, Xalqaro Onlayn Ilmiy-Amaliy Anjuman Materiallari toshkent 2021-yil 29-may
7. Быкова О.П., Учебные модули для работы с видеоматериалом. // Русский язык за рубежом, 2009: 34.
8. Костомаров В.Г., Рассуждение о формах текста в общении, 2008: 22.
9. Акишина А.А., Каган О.Е., учимся учить (для преподавателей русского языка как иностранного), 2004.
10. Вегвари В., Новые технологии в обучении русскому языку филологов Венгрии (на основе видео) Автореф. канд. филол. Наук, 1998.
11. Ишмухаммедов Р.Ж., Абдукодилов А., Пардаев А. Инновационные технологии в воспитании, 2010.

THE IMPACT OF MODERN INFORMATION PSYCHOLOGICAL THREATS ON YOUTH WORLDVIEWS

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Annotation

In today's world, where the world has become a single information space, the struggle for ideas is intensifying in various forms. At the same time, in the words of the Head of State, the struggle against anti-idea, anti-ignorance and enlightenment is becoming their main motto in the activities of the media. It is known that every newspaper, magazine, radio, television, the Internet has the power to have different levels of psychological impact on the public consciousness. For example, in newspapers, opinions are conveyed in writing, and when the time comes, through pictures. Information provided in the press can also be read over and over again and used as a source. This is one of the advantages of print media. In this article, Modern Information discusses the impact of psychological threats on young people's worldview.

Keywords: *information age, technology, psychological threat, modern information, youth worldview.*

Today, the information services of the republican television and radio company, a number of publications and organizations also bring their information to the attention of the world community through their respective websites. So, we have the right to say that the Uzbek media now has a worthy place in the world information space. In addition to obtaining the necessary information in this space, we also see the damage of information attacks, moral threats. It should be clear to all of us that in the so-called "information age" of the XXI century, no state or society can live within an iron wall. At the same time, it is not right to pretend that this is the case, and in response to such threats, we must also take the necessary measures, - said the head of state. - We know that our people are kind, simple and trustworthy. He looks with confidence at what has been published in the press, on television and on the radio. The information centers that are working against us from abroad will try to take advantage of this. "

So, we will try to find a brief answer to the question of how those who work against us use the media. We will take a broader approach to the subject in this regard. In other words, in addition to committing "information attacks" from abroad, it is appropriate to openly answer the question of whether we do not make mistakes, and whether our students are not morally harmed. As people look more confidently at the press, it means that spelling mistakes, obscene sentences, irrational ideas, wrong terms and phrases in the newspaper will make the reader illiterate and distracted. It is unfortunate that such shortcomings have been allowed in some publications in recent times.

It should be noted that the information-psychological impact is mainly carried out through the media, in particular, radio broadcasts. Some people with destructive ideas try to use this power of the media to their advantage.

Disadvantages of the Internet: anyone can enter the virtual space without hindrance with any information. In the first place, the number of intruders who take advantage of the lack of control will increase. As a result, the Internet can become a "space" that promotes vandalism, subversive ideas, pornography, and other vices. As a media outlet, there are many pros and cons of the internet. First of all, it is cheap to prepare and disseminate information, and it can easily cross the state border. It is very difficult to prevent information attacks on the

Internet⁴. It is becoming common for some people to use it to pursue their own ends through the Internet. They are trying to pose a spiritual threat in every way. So what is a spiritual threat? A brief answer to the question of why they are being threatened can be found in the book "High spirituality is an invincible force." "Spiritual threats are, first of all, ideological, ideological and informational attacks aimed at destroying the spiritual world of every person, regardless of language, religion or belief," he wrote. - If we look at the issue from a practical point of view, any attack on our spirituality is a unique and appropriate feature that makes our nation a nation, passed down from ancestors to generations for centuries, millennia, a sense of national pride, national progress. It represents the terrible dangers that call upon us to get rid of all the complications and vices of this path and to strike a great blow to our noble goals, such as building a free and prosperous life. "

It should be noted that today some media outlets are becoming a tool for information and psychological warfare.

In addition to the task of collecting and disseminating information, the modern media is also responsible for protecting the people of the country, especially the younger generation, from various information attacks and ideological threats. have sufficient skills and abilities about the capabilities of the media, methods of collecting information and disseminating it to the public. The secrets of this industry are better known to them than anyone else. But does the work being done meet today's requirements? " After all, today ideological opponents are trying to poison our spirituality, especially the minds of our youth, with "information attacks." They are increasingly threatening and influencing under the guise of "popular culture." It is impossible to look at it indifferently.

An information war waged for selfish ends is waged with careful thought. They use psychological, electronic and other methods in this regard. It doesn't take a lot of work to wage an information war, there's no need for expensive weapons. In this war, the borders of the state will not matter. Information tools have broad and narrow meanings. In a broad sense, they are actions that encourage the opponent to think in the right direction, are able to change his point of view, and are carried out with the help of the necessary information. In the narrow sense - technical methods and technologies that provide control over the opponent's information resources and damage its telecommunications systems. Hence, information weapons are special devices and tools that affect a competitor's information and management systems. Naturally, the possibilities for the use of such weapons by countries with advanced information technologies are very wide.

REFERENCES

1. Lyddon, W. J., & Adamson, L. A. (1992). Worldview and counseling preference: An analogue study. *Journal of Counseling and Development*, 71, 41–47.p
2. Lyubomirsky, S. (2001). Why are some people happier than others? The role of cognitive and motivational processes in well-being. *American Psychologist*, 56, 239–249.p
3. Markova', I. (2000). The individual and society in psychological theory. *Theory and Psychology*, 10, 107–116.p
4. Is Personal Life Purpose Replacing Shared Worldview as Youths Increasingly Individualize? Implications for Educators.

https://www.researchgate.net/publication/333518529_Is_Personal_Life_Purpose_Replacing_Shared_Worldview_as_Youths_Increasingly_Individuate_Implications_for_Educators

5. The Psychology of Worldviews. https://www.researchgate.net/publication/232554126_The_Psychology_of_Worldviews



DESIGN AND ANALYSIS G+36 STOREY RCC BUILDING USING VISCOELASTIC DAMPER ON ETABS

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ABSTRACT

During a major earthquake a large amount of energy is fed into a structure. The manner in which this energy is consumed determines the level of damage. The primary emphasis is on life safety with an expectation of substantial structural damage. In general reliance for survival is placed on the ductility of the structure to dissipate energy while undergoing large inelastic deformations causing bending, twisting and cracking. Earthquakes have clearly shown that conventional construction is even technologically advanced industrialized countries is not immune to destruction Viscoelastic damper is one such passive control device with several advantages. . Three types of dampers have been taken in present investigation. ETABS software has been used to model G+36 tall building structure and dampers. Analysis of structure without dampers and then with dampers has been done and difference in responses of structure like Storey drifts, Storey acceleration, Storey displacement etc. is presented here.

Keywords, Bracing, Storey Drift, Seismic analysis, Deflection, Viscoelastic Damper (V.E.).

INTRODUCTION

Earthquakes are one of man's most feared natural phenomena. Major earthquakes producing instantaneous destruction of building and other structure. The damage caused by earthquake is almost entirely associated with manmade structure such as Buildings, Dams, Bridges and other works of man. Unfortunately, many of earthquakes give very little or no warning before occurring and this is one of the reasons why earthquake engineering is complex. On average about 200 large magnitude earthquakes occur in each decade. About 10%-20% of these earthquakes occur mid-ocean and hence cause no problem in human settlement. No engineer can truly transform badly conceived building into an earthquake resisting building. Simplicity, Regularity and symmetry in both elevation and plan are the ideal aspects of the building. These properties are important to predict the forces and distribution of forces in structure while irregular structure causes increase in dynamic response at certain location of structure. Also, buildings which are tall as compared to their plan area will generate high overturning moment while building with large plan area may act differently. Structural members. The operation of these special devices is initiated by the motion of the structure and, guided by the control scheme; they reduce the overall response of the system and thus meet the design goal in mitigating seismic damage. Various response control methods have been implemented in the design procedures and can be generally divided into three groups: passive control, active control, and semi-active.

This paper discusses the use of Viscoelastic dampers (passive control) as they are capable of reducing the building motion or responses by converting a portion of the mechanical energy into heat. The function of passive energy dissipation systems, on the other hand, is to absorb energy generated by the seismic or wind excitation. These are installed strategically in the structure to link various parts of the framing system, and provide supplemental damping to dissipate the energy. Since these added dampers can be designed to consume a major portion of the input energy so that less is available to the main structure, the deformation in the primary members is significantly reduced, hence limiting the structural damage.

Many research works is going on Viscoelastic dampers which show that the analysis and their working is complex in nature. The feasibility of using viscoelastic dampers to mitigate earthquake-induced structural

response has also been studied by various authors. Chang Y.Y. Lin & M.L. Lai compared seismic performance between the viscoelastically damped structure and a conventional special moment resisting frame. The temperature variation formula during an earthquake excitation was introduced. They also studied the change in the natural frequency due to addition of viscoelastic damper. Julius Marko showed that bitumen rubber compound VE damper induces large damping forces to shear deformation and can sustain shear strains of about 300% and can reduce seismic response by 50% and super-plastic silicone rubber VE damper reduces response up to 60%. Different models were cited and dynamic analysis of the frames with viscoelastic damper was carried to derive the formula for energy dissipation by R. Lewandowski et al. B. Samali & K.C.S Kwok showed that amount of energy stored in damper is about 2-4% and thus rest of it is dissipated. Many others have studied the seismic analysis and performance of structures with VE damper and this paper also addresses issue even for wind effects on performance.

MECHANISM OF VISCOELASTIC DAMPER

When stress is applied to a viscoelastic material such as a polymer, part of the long polymer chain change positions. This movement or rearrangement is called Creep. Polymers remain a solid material even when these parts of their chains are rearranging in order to accompany the stress, and as this occurs, it creates a back stress in the material. When the back stress is the same magnitude as the applied stress, the material no longer creeps. When the original stress is taken away, the accumulated back stresses will cause the polymer to return to its original form. The material creeps, who gives the prefix visco-, and the material fully recovers, which gives the suffix - elasticity. After loading over time, the material recovers their initial strength, which the amount of this recovery depends on the temperature of the material, stimulant frequency and strain amplitude. In short, there is an increase in stiffness and damping in the structural system by installation of this material. Installation of the dampers should not be limited only to braces, but they can be used with special arrangements throughout the structure in which shear deformations occur.

MODELLING OF G+36 RCC BUILDING ON ETABS2015

To incorporate viscoelastic dampers in a high-rise building which could improve the dynamics performance of the building by using E-TABS modeling and also to study the reduction in deflection and base shear of structure with and without viscoelastic dampers. The building is analyzed in 2 stages, first is without any dampers and second is using D3 type of damper, best brace configuration and best location of the dampers will be concluded. And using three different dampers, differences in response will be studied. Analysis is done on ETAB software. The height of the building is 130.5m (high rise). The building is situated in Mumbai with medium soil condition. Total load (DL+LL) is assumed to be 15 kN/m². Seismic Coefficient method as per IS 1893 (Part 1): 2002 is used for seismic load analysis and Gust analysis is used for wind loading as per IS 875 (Part 3): 1987. Load Combination was used as per specified by IS 456: 2000. Various properties of the elements used to model in ETABS are given in the Table1-5.

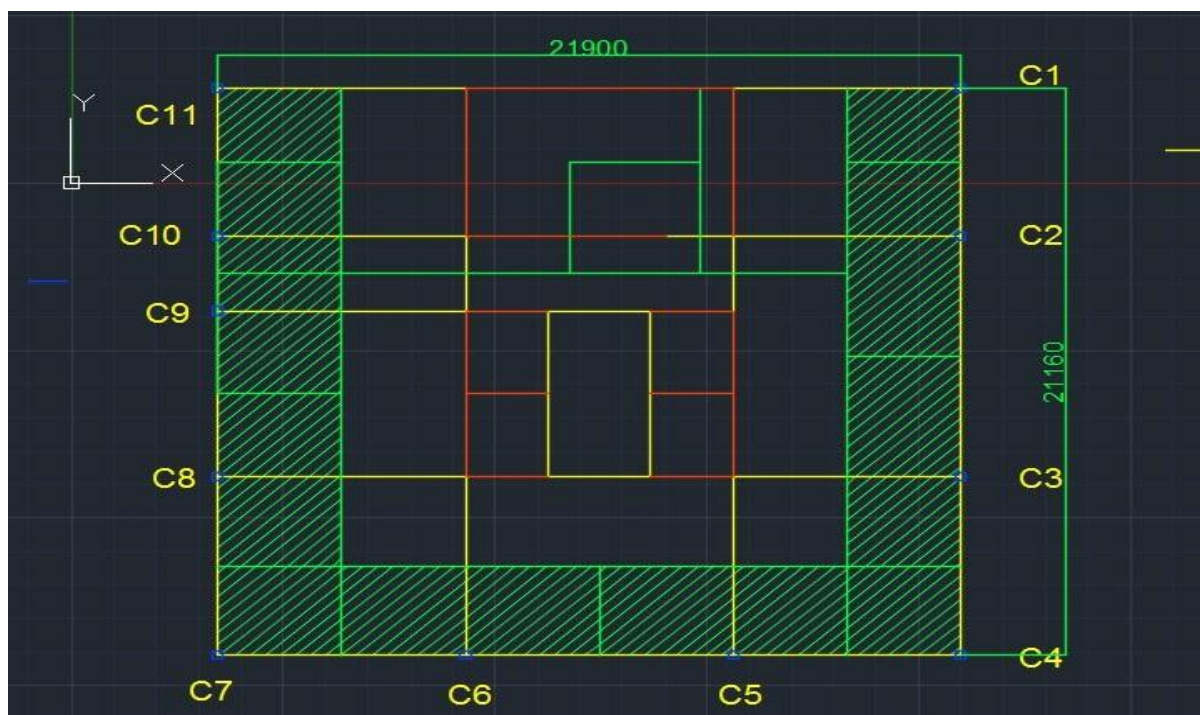


Figure 1: Typical Plan of G+35 RCC Building

Table 1. Concrete grade used for different structural elements in building

Member	Levels	Concrete grade
Footing	-	M50
Columns	Ground floor to 8th floor	M50
	9th floor to 17th floor	M40
	18th floor to terrace (Storey 36)	M30
Shear Wall	Ground floor to 8th floor	M50
	9th floor to 17th floor	M40
	18th floor to terrace (Storey 36)	M30
Beams / Slabs / Staircase	All slabs	M40
	All beams	M40

Table 2. Grouping of Columns

From Foundation up to 8 th Floor (mm) (Grade M50 & Fe 500)								
C1,C4,C7,C11	650	650	C2,C3,C6,C8	1800	500	C9,C10	1100	500
From 9 th floor up to 17th Floor (mm) (Grade M40 & Fe500)								
C1,C4,C7,C11	600	600	C2,C3,C6,C8	1800	400	C9,C10	1100	450
From 18th up to 35th Floor (mm) (Grade M30 & Fe500)								
C1,C4,C7,C11	500	500	C2,C3,C6,C8	1800	300	C9,C10	1100	300

Table 3. Beams Properties of Structural Elements of the Building

Frame Element	Material	Area of section
External Beam connected to shear wall of staircase and columns & internal beam connected to lift Depth = 600 mm; Width = 400 mm	Concrete	0.24 m ²
Internal Beam connected to shear wall Depth = 600 mm; Width = 500 mm	Concrete	0.30 m ²
Internal beam connected to shear wall of lift Depth = 1200 mm; Width = 600 mm & Depth = 600 mm; Width = 300 mm	Concrete	0.72m ² 0.18m ²
Other internal beams Depth = 600 mm; Width = 650 mm & Depth = 1200 mm; Width = 500 mm	Concrete	0.39m ² & 0.6m ²

Table 4. Slab Properties

Slab type	Dimension	Thickness
Two way	6.68mx5.5m	225mm
Two way	6.68mx9m	250mm
Two way	6.68mx6.66m	225mm
Two way	7.92mx6.66m	225mm
Two way	7.3mx6.66m	225mm
Two way	7.3mx6.2m	225mm
One way	7.3mx2.8m(Passage)	150mm
One way	7.92mx2.8m(Passage)	150mm
One way	2.8mx6.2m(Passage)	150mm
One way	7.92mx5.5m	225mm
One way	7.3mx5.5m	225mm

Table 5. Damper Properties⁷

Damper Name (Notation)		3M ISD 110 (D1-30C Temp)	3M ISD 110 (D2-20C Temp)	D3-K57-D12
Type of Damper		Exponential	Exponential	Exponential
Non Linear		Yes	Yes	Yes
Linear Properties	Effective Stiffness (kN/m)	17839.01	62750.13	57000
	Effective Damping (kN-s/m)	19808.12	69676.63	12000
Non Linear	Stiffness (kN/m)	17839.01	62750.13	57000

Properties	Damping (kN-(s/m) ^{Cexp})	19808.12	69676.63	12000
	Damping Exponent	1	1	1
Effective temperature (in degree)		30	20	Ignored

RESULTS AND DISCUSSION

Configuration Selection for Bracing for dampers

V.E. Dampers are fixed on Bracings. Hence various configurations of diagonal bracing were studied to decide the best configuration for fixing of dampers. This was based on reduction in critical displacement which is in Y Direction for Wind forces. The amount of bracing material was kept same & the configuration was changed to get configuration with minimum deflection. For this bracing with Damper D3 K57D12 where applied in 8 no.s per floor from 36-2nd Storey.

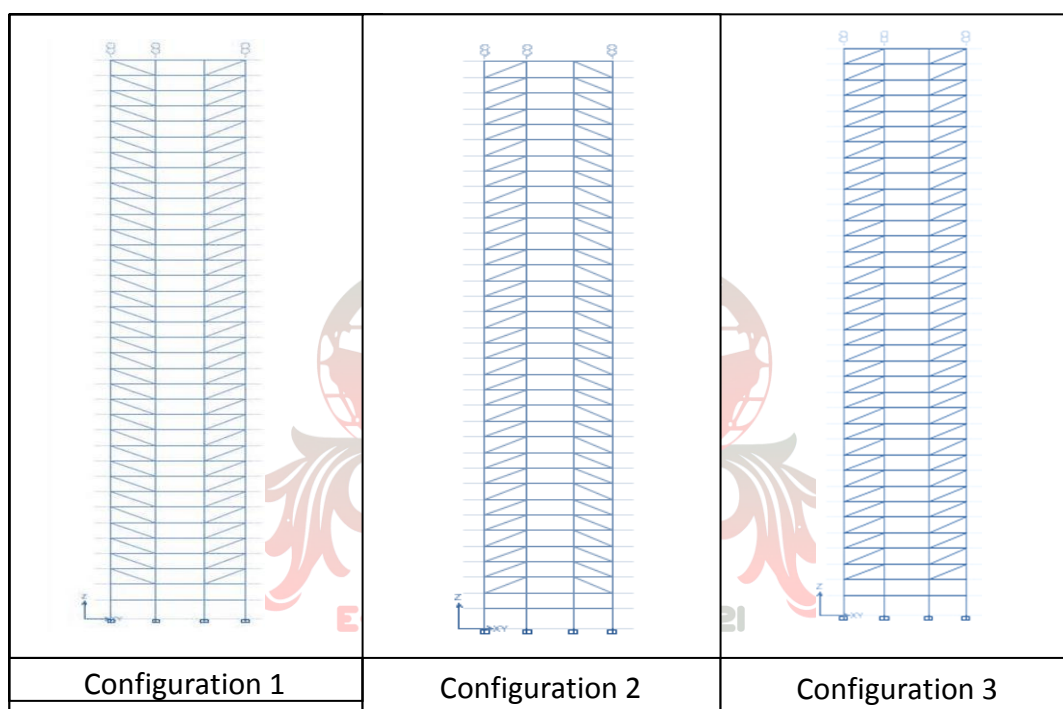


Figure 2: Various Bracing Configuration used

The building was modeled on ETABS and following results were found out which is summarized in Table 5, 6 & 7.

Table 6. Average Reduction in Displacement of Stories due to Spec (Seismic) under different Configurations

Configuration	X Direction (%)	Y Direction (%)
Config. 1 With D3	20.48	16.10
Config. 2 With D3	20.88	16.65
Config. 3 With D3	20.43	16.81

Table 7. Top Storey Displacement due to Spec under different Configurations

Configuration	X Direction (mm)	Y Direction (mm)
Without Dampers	120.5	142.9
Config. 1 With D3	98.71	121.00

Config. 2 With D3	98.21	120.81
Config. 3 With D3	98.49	120.11

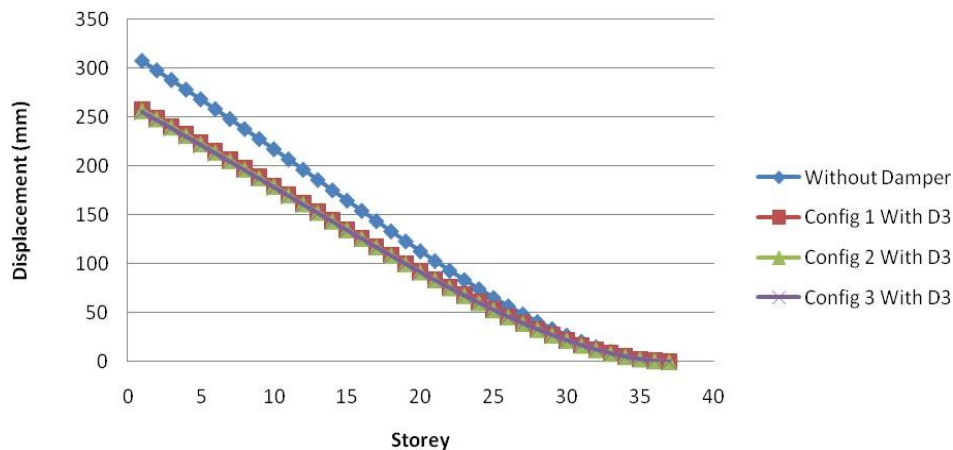


Figure 3: Displacement Due to Wind Y in Y Direction for Various

Configurations Table 8. Top Storey Displacement due to Wind under

Config.	X Direction (mm) different Configurations	Y Direction (mm)
Without Dampers	239.5	307.6
Config. 1 With D3	163.60	257.61
Config. 2 With D3	161.50	256.70
Config. 3 With D3	162.71	255.31

For G+35 Storey Building with Height 130.5m permissible deflection in Wind is $H/500$ i.e. 261mm & For Earthquake is $H/250$ i.e. 522mm. From the above tables it can be seen that there is maximum reduction in Storey displacement in Direction Y for Wind Y is by Configuration no. 3 where top Storey displacement reduced from 307.5mm (more than permissible 261mm) to 255.3mm (within permissible) hence it is to be used for further analysis.

1. Damper placement at different locations

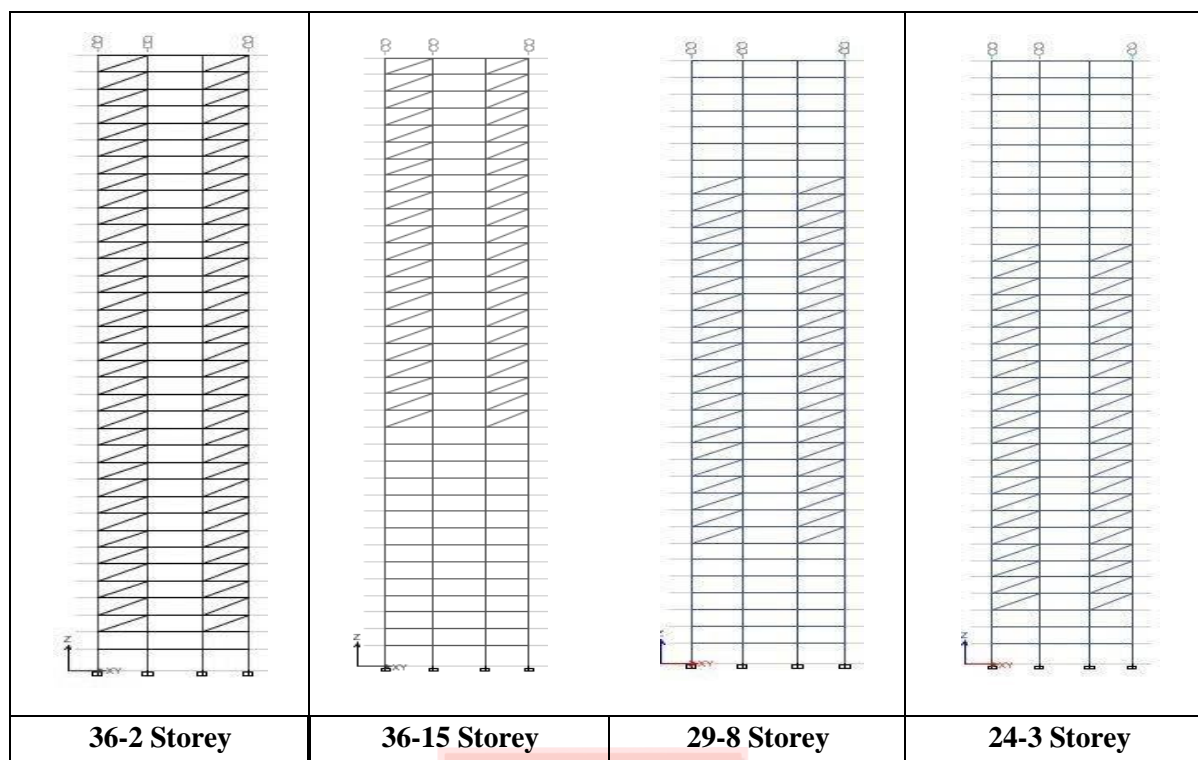


Figure 4: Various Damper Placement Locations

Here 4 cases of damper placement have been studied & these are shown below. In first case dampers have been placed throughout & in second case at the position of maximum absolute displacement in building while in 3rd case dampers have been placed at position of maximum Storey drifts & in 4th in lower stories. At each story 8 dampers have been placed. Main objective of this study is to know the best possible position in building for dampers placements so that damper can be utilized in reducing structure responses in more effective ways.

Table 9. Top Storey Displacement due to Wind under different Configurations

Damper Location	X Direction (mm)	Y Direction (mm)
Without Damper	239.3	307.6
36-2 Floor	162.70	255.30
36-15 Floor	190.70	281.50
29-8 Floor	171.00	259.99
24-3 Floor	177.9	275.6

Table 10. Top Storey Displacement due to Spec (seismic) under different damper location

Damper Location	X Direction (mm)	Y Direction (mm)
Without Damper	120.58	142.81
36-2 Floor	98.50	120.10
36-15 Floor	103.80	128.40
29-8 Floor	101.59	121.61
24-3 Floor	102.09	124

From the above tables it can be seen that there is maximum (economical) reduction in Storey displacement in Direction Y for Wind Y is by placing the dampers at 29-8 Storey where the Storey drift was maximum. The percentage reduction in displacement is 15-16% for both wind and spectral (seismic) forces. The top Storey displacement reduced from 307.5mm (more than permissible 261mm) to 259.98mm (within permissible) hence this location is to be used for further analysis. The main reason for Location 29-8 Storey to be best is that placing dampers here help to reduce the Storey drift & thus reduce displacement. Placing dampers in top stories is not advantageous. Further placing dampers in lower operation 24-3 Storey reduces displacement in lower stories but not top Storey displacement. Placing dampers from 36-2 Storey (i.e. at all floors) reduces just 1.5mm more deflection then that by 29-8 Storey. Thus it is not economical to go for 36-2 Storey location i.e. using 112 No. of extra dampers for 1.5mm displacement reduction.

Analysis with Best Bracing Configuration & Damper Location

After Successful Deciding Best Configuration of Bracing & Best Location of Dampers we will use Configuration No.3 for 8-29 Storey Damper location & further carry out analysis for studying various characteristics of structure & various types of Dampers.

Table 11. Time period reduction of building due to dampers

Various Mode	D1	D2	D3
Average Time period %reduction	12.35802	13.29827	13.0469

It can be seen from above Table 11 that there is reduction in time period of structure by addition of Viscoelastic dampers due to increase in stiffness of structure. Further D2 K70D63 -20°C being the most stiffness have the lowest time period while followed by D3 K57D12 -30°C which has second highest stiffness has second lowest time period & D1 K18D20 having lowest stiffness & highest time period.

Analysis for Seismic Forces

Table 12. Average Reduction in Acceleration of Stories due to Spec under different VE dampers

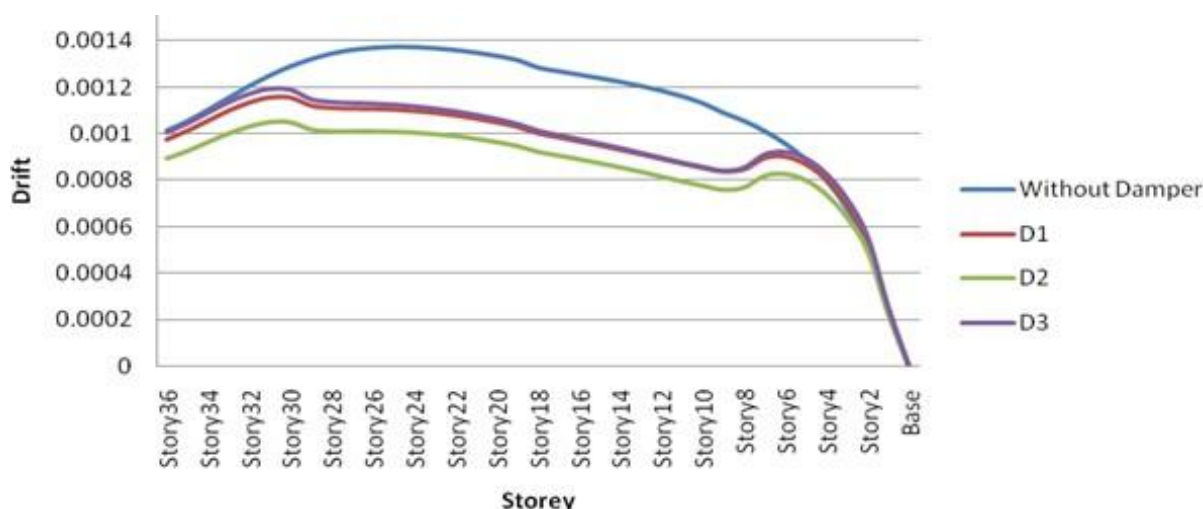
Damper	X Direction (%)	Y Direction (%)
D1	9.65	3.25
D2	24.64	15.61
D3	14.87	4.75

It can be seen from above Table 12 that there is reduction in acceleration response of structure due to addition of VE damper. Compare to X-direction, response reduction in Y-direction is less may be because of presence of shear walls in that direction. Dampers having higher damping coefficient + higher stiffness (D1 K70D63) perform well in reducing Storey acceleration than dampers with higher stiffness value + less damping value (D3 K57D12). So it can be concluded that damping plays important role in reducing Storey acceleration.

Table 13. Average Reduction in Storey Drift under Spec under different dampers

Damper	X Direction (%)	Y Direction (%)
D1	14.35	12.01
D2	21.63	17.94
D3	12.59	13.93

Figure 5 shows the considerable reduction in Storey drift in X-direction of the structure with respect to that



of the structure without damper. Similarly, it was also found for Y-direction.

Figure 5: Storey drift response of structure in X-direction (SpecX)

Reduction in drift is because of added stiffness and damping of structure because of addition of dampers. Here also damping component of damper plays important role. This is the sole aim of using dampers. Table 14 shows the percentage reduction in displacement in two directions which is also quite considerable for a high rise structure. Base shear is also important for design of foundations hence its reduction was also analyzed (shown in Table 15).

Table 14. Average Reduction in Displacement of Stories under Spec under different dampers

Damper	X Direction (%)	Y Direction (%)
D1	14.79	14.51
D2	21.61	18.12
D3	13.17	14.39

Table 15. Reduction in Base shear

Dampers	D1	D2	D3
X-Direction Reduction %	16.33	28.33	2.59
Y direction Reduction %	10.48	22.72	2.62

Analysis for Wind Forces

Following Table 16 shows percentage reduction in displacement of top Storey due to damper system. From above table it can be seen that there is a reduction in Storey displacement in both directions by addition of viscoelastic damper. Compare to earthquake response, response reduction for wind is less because wind is applied as static load. Table 17 shows that reduction in drift is high as 25% in X-direction.

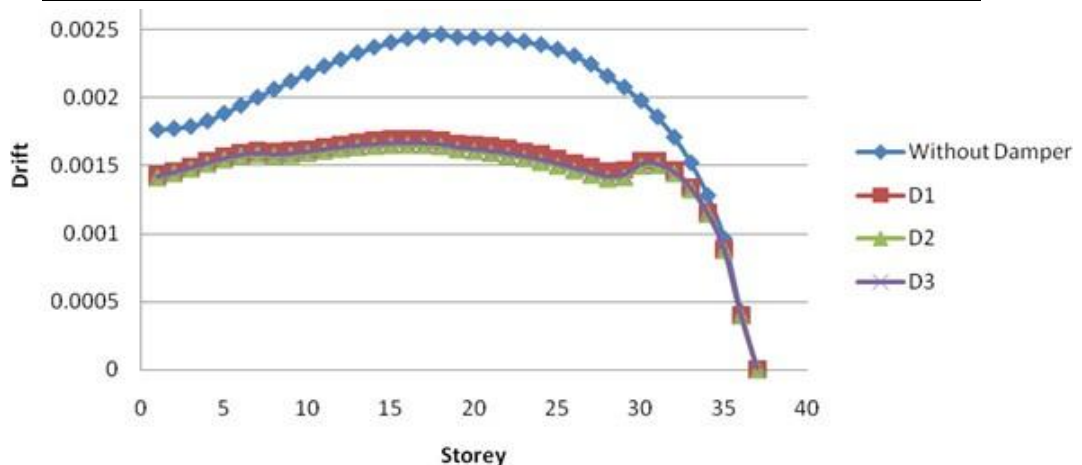
Table 16. Average Reduction in Displacement of Stories due to Wind under different dampers.

Damper	X Direction (%)	Y Direction (%)
D1	25.15	14.42
D2	26.76	15.27

D3	26.25	15.00
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Table 17. Average Reduction in Storey Drift due to Wind under different dampers

Damper	X Direction (%)	Y Direction (%)
D1	24.45	13.68
D2	25.93	14.50
D3	25.47	14.25

**Figure 6: Storey drift response of structure in X-direction due to wind**

It seen for Figure 6 that the there is considerable amount of reduction in story drift. Further commenting that it cannot be concluded which type of damper is the best as the difference in results are small. Also in the literature it is seen that many factors affect the performance of damper which has to be modeled and studied and detail. This will require deeper analysis of the responses with varying property of the structure

CONCLUSION

The present study was to analyze tall building without and with viscoelastic dampers and to assess the seismic behavior of structure. The main purpose of this study is to investigate the effectiveness of viscoelastic damper which provides both additional stiffness and damping to structure. From all of results presented above following conclusions have been made:

- 1) The results of this investigation show that, response of structure can be reduced to considerable amount by installation of viscoelastic dampers.
- 2) Properties of dampers i.e. stiffness and damping coefficient are highly sensitive to temperature changes but comparatively less sensitive to frequency change. Bracing plays an important role in reducing difference in efficiency of damper due to changes in temperature. Also properties of dampers are inversely proportional to temperature i.e. lower the temperature higher will be the damper properties.
- 3) Compare to reduction in displacement, reduction in Storey drifts and acceleration is more which indicates that dampers are prominently effective in reducing Storey acceleration and Storey drift than Storey displacement.
- 4) If alone bracing are provided it will make structure stiff & if dampers are provided it will provide passive flexibility i.e. dissipating energy & thus provide flexibility. As a result there will be reduction in area of steel (5-30%) & thus economy in design.

5) To reduce Wind Deflection, Stiffness Property of Damper is Important & to reduce Earthquake Deflection, Damping Property of Damper is important.

SCOPE OF FUTURE WORK

It is recommended that further research be undertaken in following areas:

- 1) Different damper locations or provision of damper in the core of building can also be studied.
- 2) Steel Structures can be used along with V.D
- 3) Determining effect of dampers on design of structural component like beams and column.
- 4) Determining the seismic behavior of tall building structures by using different arrangements of

viscoelastic damper devices in the field of their locations in the building.

REFERENCES

1. B. Samali, K.C.S. Kwok, Year 1995, "Use of viscoelastic dampers in reducing wind and earthquake induced motion of building structures" Engineering structures, vol-17, No.9, pp. 639-654.
2. IS 1893(Part 1)-2002 "Criteria for Earthquake Resistant Design of Structures: Part 1 General provisions and Buildings".
3. IS 875(Part 3)-1987, "Code of practice for design loads (Other than earthquake) for buildings and structures."
4. Lewandowski, R., Bartkowiak, A., & Maciejewski, H. (2012). Dynamic analysis of frames with viscoelastic dampers: a comparison of damper models. Structural Engineering and Mechanics, 41(1), 113-137.
- Forman, G. 2003. An extensive empirical study of feature selection metrics for text classification. J. Mach. Learn. Res. 3 (Mar. 2003), 1289-1305.
5. Marko, J., Thambiratnam, D., & Pereira, N. (2004). Influence of damping systems on building structures subject to seismic effects. Engineering Structures, 26(13), 1939-1956.
- Tavel, P. 2007 Modeling and Simulation Design. AK Peters Ltd.
6. Julius Marko, David Thambiratnam and Nimal Pereira, "Study of Viscoelastic and Friction Damper Configurations in Medium-Rise Structures".
7. Vijay, U. P., Raj Kumar, P. K., & Ravichandran, P. T. (2015). Seismic response control of RC structure using viscoelastic dampers. Indian Journal of Science and Technology, 8(28).

XOJA MAHMUD ANJIR FAGHNAVI- THE THIRD PIR OF BUKHARA SHARIF**Navruzova Gulchehra Nigmatovna**Professor Doctor of sciences philosophy, Bukhara Engineering Technological Institute, UZBEKISTAN
navruz-zoda@mail.ru**ABSTRACT**

The article is about Xoja Mahmud Anjir Fagnavi (was born in 1196, passed away in 1286, 685 Hijri), who is Orif Revgari's student, teacher of Xoja Ali Romitani, the third feast of the holy Bukhara, a feast of the 12th ring of the Sufi tariqah of Khojagan, the representative of Khojagon Sufism education. The article substantiates the role of Muhammad Boboi Samosi in the development of Bahauddin Naqshband.

Keywords: *Khodjagon, Sufi tariqat, perfection, third feast, Xoja Mahmud Anjir Fagnavi, honesty, sobriety, zikr, xufiya zikr (silently remembering God), jahriya zikr (remembering God loudly), «The God is in heart, and hands are in work».*

Mahmud Anjir Fagnavi studied Sufism education from Orif Revgari (the second pir of Bukhara Sharif famous as Mohitobon), he was the perfect man of his time, and gave others the light of truth.

The great sheikh of Khojagon education Mahmud Anjir Fagnavi was born in 1196 according to Arabic sources. He was born in the village of Anjir Fagnavi, Vabkent district of Bukhara Region. Now, this blessed address is called Anjirbog. Sheikh's original blessed name is Mahmud. Mahmud is the Arabic word means praised and good. The Anjir Fagnavi is the name given to the birthplace of Fagnavi. Also, there are beautiful signs outlined by this person about the fig. Although the texts of the stories are different, they are one essence. Sheikh Mahmud will be asked to give fruits during the winter season. Then he put their hands on the pure earth, and took fresh figs. The legend about fig was happened by Fagnavi. It is clear that the divine sign should focus on the mystery of the fig. When man's father Adam and his mother Eve asked for leaves from trees to cover their nakedness because of lack of clothing in Paradise, the fig tree only satisfied their request. For this purpose, Allah has glorified figs and revealed in Surat al-Tin, Surah Anjir. It is said that mushki anbar (good smell) is made from the animals which are feed by fig tree leaves. So, Anjir Fagnavi also told that people must be useful for others and be good persons.

Mahmud Anjir Fagnavi was handsome man but not tall, was a white person with beautiful nose, and wide mouth with black beard. He had white turban on his head had many prophecy. He was from the generation of sayyids.

Mahmud Anjir Fagnavi always lived up to his honesty. He was engaged in craftiness, carpentry, and trade.

There is some information about him in "Manoqibi Khoja Abdulkholik Gijduvoni" by Mahdumi Azam: "Khoja Mahmud Anjir Fagnavi was great person of Sufism education, he was taught tariqat and shariat by Khoja Orif, and divine science from Khoja Abdulkholik Gijduvani."

Mahmud Anjir Fagnavi served Khoja Orif Revgari was the most perfect student and follower. He was a close friend of Orif Revgari's sufism sciences. As a result, he reached such a level of maturity that he was described as "his wisdom leak through his finger". Allah the Almighty gave his blessings to the hearts of the

righteous believers, purified their hearts from darkness, and snatched their curtain over them with mercy because of him.

There are some words about his maturity status in “Manoqibi Khoja Abdulkholik Gijduvani” by Mahdumi Azam: “When Khoja Mahmud says “Ya Rabbiy”(o my God), there is the answer of Allah “Labbayka ya abdi”(yes my slave) ”.

They say that Satan(Devil) has been walking with him for 12 years to mislead Khoja Mahmud. One evening he came to see Mahmud with a candle. Khoja Mahmud was at buried place of Khoja Abdulkholik The Devil asked Hoja Mahmud, "How long is the forty trip distance?" This was the purpose of the devil, when Khoja Mahmud replied "I am a man", that is, manga. Man (I am) is considered to be proving himself to be a sect, and it is inappropriate. The Prophet (peace be upon him) said: "La takilni ila nafsi '(do not leave me alone). Khoja Mahmud knew the purpose of the devil and replied "Hasht and panj" (eight or five) trips. (So, eight or five trips a mile). When he heard this answer, Satan put his head on the ground and said, "For 12 years, I could not make him mislead, so why to stand with him?"

A loud voice remembering is one of the main acts of Sufism that help the perfection of human beings and lead them to vigilance and cognition by awakening their sleep is zikr (remembering Allah all the time). Abdulkholiq Gijduvani and Orif Revhari performed a ridiculous secret, that is, a silence remembering.

Mahmud Anjir Faghnavi with the permission of his teacher, he began to introduce a loud voice remembering (zikri jahriya) which he performed with loud voices. When they ask him about the reasons, he replies: "It is because we have chosen the way of this remembrance, so that to awake those who sleep. Let them be free from ignorance and be submissive to the Shari'ah and the Laws. Let them attain the happiness of the two worlds, the privilege of being a servant of the true Allah. I want to awaken the sleeper and the deceased, so that they should turn to the truth and repent with their Lord in sincerity. Indeed, turning to Allah is a sign and key of happiness."

Mahmud Anjir Faghnavi applied a loud voice remembering at that time with good wishes and the scholars of that time used his action. As a result, from the time of Mahmud Faghnavi until Bahauddin Naqshband they used both silence and loud voice remembering.

“Who can do loud voice remembering?” was asked by Mahmud Anjir Faghnavi. “The Sufi whose tongue is free from lie and slander, whose stomach is free from haram food, whose heart is free from the wishes of being famous and hypocrisy, whose insight is free from bad things and the world can do a loud voice remembering,” he answered.

According to Mahmud Anjir Faghnavi there is the same aim of silent and loud voice remembering- to reach to truth, Allah. There is importance of situation, advice, wisdom.

Mahmud Anjir Faghnavi was the teacher of “the twelve Circle” and brought up many people. In “Rashahot aynul hayot” by Ali Safi there is a story: Khoja Ali Rometani asked Khizr “Whom to chose as a teacher at the moment?” Khizr replied “At this moment chose Mahmud Anjir Faghnavi as a teacher” According to the advice of Khizr Khoja Ali Rometani (famous as Azizon) was a student of Mahmud Anjir Faghnavi.

In source there is information about many prophecies of Anjir Faghnavi. If it is necessary he could fly like a big bird. Khoja Ali Rometani said, once he together with his companions were busy with remembering a big bird appeared on their heads and told "Ali, be careful" in human language and everybody understood the bird, and asked Ali what the meaning was. "The bird is Mahmud Anjir Faghnavi. Now he is flying to Khoja Dehqon Kalti. Khoja Dehqon Kalti is the student of Kabir the Saint. Kalti asked from Allah "When my last breath is approaching, make my and Allah's friends to be near to me so that my death will be easy" that's why Khoja Mahmud flying to him," he replied.

Mahmud Anjir Faghnavi was honored as "Gibtafarmoniy surayyo". Surayyo is described as a Hulkar, a collection of stars, with the name of the Great Creator, who imparted the Divine Decree to His slaves, giving the light like a star.

Khoja Mahmud Anjir Faghnavi passed away in 1286 (685 Hijri). His grave is located in Anjirbog village in Vabkent district of Bukhara Province. He gave the Shaykh's permission to Khusayn Amir Khurd Vobkandi (1319) and Khoja Ali Rometani (1321).

In summary, we can say the following:

1. Khoja Mahmud Anjir Faghnavi is a worthy, praiseworthy like his name.
2. Khoja Mahmud Anjir Faghnavi has the characteristics of the fig tree, when he was always ready to give the necessary help, he was ready to fly as a bird.
3. Khoja Mahmud Anjir Faghnavi was taught spiritual, divine knowledge by Khoja Abdulkholik Gijduvani and the knowledge of Sufism education by Orif Revgari.
4. From the time of Khoja Mahmud Anjir Faghnavi to time of Bahauddin Naqshband there was both silent and a loud voice remembering. He added the a loud voice remembering in khojagon education.
5. Khoja Mahmud Anjir Faghnavi was the perfect teacher of his time and brought up a lot of followers. He educated Khoja Ali Rometani famous as Azizon.

LITERATURE

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1. Abul Muhsin Muhammad Baqir ibn Muhammad Ali. Authority Hoja Bahouddin Naqshband. / Persian translator, foreword, commentary and dictionary author Mahmud Hasani. Tashkent: NMIU "Uzbekistan", 2019. 335 b.
2. Knysh A. D. Muslim mysticism: A short history / Per. from English M.G. Romanov. - SPB .: "Publishing house" "Dilya", - S, 2004 250-251. 6.
3. Navruzova G., Zoirov E. Mahmud Anjir Faghnavi - the third Piri of Bukhara Sharif./ Seven Pirs of Bukhara Sharif. Tashkent: Muharrir Publishing House, 2018. Pages 24-30.
4. Navruzova G. "Bahauddin Naqshband - the seventh pir of Bukharai Sharif (Noble Bukhara)". Islamic thinking. Scientific-educational, religious-cultural, information publication magazine. Tashkent. Special issue, 2020. pages 5-8.
5. Navruzova G. N., Ubaydova V. Pharaoh of the weavers of Bahauddin Naqshband. Academicia An International Multidisciplinary Research Journal Vol.10, Issue 5. May Impact Factor: SJIF = 7.13. 922-26, 2020.
6. Navruzova G.N. Sayyid Amir Kulol and Bahauddin Naqshband//Philosophy and Life. January, April, special issue 1, 2021. 66-79 pages.

7. Navruzova G., Xoja Bahaiddin Naqshband's life and spiritual heritage. Toshkent: Academy of sciences of the Republic of Uzbekistan "Fan" publishing state-owned enterprise, 2021. 244 pages.
8. Navruzova G., Sayyid Amir Kulol-Bahaiddin Naqshband's teacher. *Academicia An International Multidisciplinary Research Journal* Vol/11, Issue 10, October 2021. Impact Factor: SJIF 2021=7.492. 2109-2116 pages.
9. Navruzova G., Akobirova D. Orif Revgari. Toshkent: "Paradigma", 2018. 56 pages.
10. Navruzova G., Akobirova D. Mahmud Anjir Fagnavi. Buxoro: "Buxoro", 2019. 30 pages.
11. Nasir ad-din Tora ibn Amir Muzaffar Al-Hanafi al-Bukhari. Hodja Baha-ad-din Naqshband and his teachers and mentors. Popular science collection. Compiler of the collection, translator, introduction, introduction and comments by B. Qazoqov. Bukhara: "Bukhara", 1993. pages 13-14.
12. Sadridin Salim Bukhari. Hazrat Hoja Mahmud Anjir Fagnavi/Sacred shrines of Bukhara, Tashkent: "Navro'z", 2015. Pages 151-153.
13. Sayfiddin Sayfulloh, Nodirkhon Hasan. Xojagon Naqshbandiya mashoyixlari./Xoja Abdulkholiq Gijduvoni. Maqomoti Yusuf Hamadani./T.: Yangi asr avlodi.2003. 47 p.
14. Sayfiddin Sayfulloh. Hoja Mahmud Anjir Fagnavi/Seven Pirs(teachers of world). Toshkent: "O'zbekiston", 2019. Pages 99-107.
15. Trimingham. J.S. Sufi orders in Islam. Per. from English A.A. Staviskaya, edited and with a foreword. O.F. Akimushkina. M.: Science. The main editorial office of oriental literature, 1989. p. 61.
16. Fakhriddin Ali Safiy. Rashahot: (water drops of life). Historical and educational work. Conversion and ending author: M. Hasaniy; dictionary, ending author and editor-in-chief: B. Umrzoq; Institute of Oriental Studies named after Abu Rayhan of the Academy of Sciences of the Republic of Uzbekistan. - T.: Abu Ali ibn Sina Medical Publishing House, 2003. pp. 62-64.
17. Fakhriddin Ali Safi. Hazrat Hoja Bahaul Haq wad-Din Muhammad (q.s) famous as Naqshband / Rashahot ayn-al hayot // Bahaiddin Naqshband (analysis of sources). Prepared for publication, author of articles, comments and reviews G. N. Navruzova. Tashkent: Sano-Standard Publishing House. 2019.

PRACTICAL VALUE OF USING STATIVE VERBS IN ENGLISH LANGUAGE

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ABSTRACT

The given article focuses on the practical aspects of teaching dynamic and stative verbs and recommends some pedagogical implications that can help teachers of English language to build up effective methods for improving learners' competence in studying these verbs. The root cause of the problem which is mentioned above is the lack of grammatical and practical skills in English language. The findings show that errors frequently appear in the choice of defining verbs that can be used as stative and dynamic, depending on the context they appear in the groups of verbs of appearance; verbs, describing mental processes and verbs of senses. The information outlined in this work can be handy for comprehension of linguistic features of stative verbs which might be easier to master.

Key words: *stative verbs, dynamic verbs, grammatical features, aspectual classes, semantic meaning.*

INTRODUCTION

Teaching English verbs has always placed a great importance on the interrelation between grammar and meaning in the structure of language. The way in which this interconnection can be explained is through an analysis of the lexical units that expresses activities and states. Most course books and grammar books in English do not focus on specific characteristics of stative verbs and the difference between active and stative verbs. They put an emphasis on rare occurrences in the progressive form of stative verbs as they represent a state which does not involve a notion of movement toward completion. These verbs are presented in contrast to active verbs, which are syntactically non-stative and which involve a certain activity by the subject. Being part of the denotation, a process or a state, therefore, belongs to the semantics of a verb. In particular, stativity is a purely semantic notion.

MAIN PART

Ways of teaching stative verbs

While teaching verbs in English, it stands obvious that majority among students lack knowledge about dynamic and stative verbs. Furthermore, they make errors when using them. When they are asked to differ the form of the verbs students are not confident to choose between the simple and the progressive form as in the following example:

The flower **smells** / **is smelling** good.

In the first sample, the speaker reports on what is perceived, i.e. the subject is not a perceiver. In order to make it clear we want readers attention to be drawn to the difference between the three groups of verbs as follows:

Dynamic verbs: listen, look, touch, etc.;

Stative verbs: understand, know, believe, own, etc.;

Both dynamic and stative verbs: feel, smell, sound, taste, think, have, etc.

Previous research in this field

Vendler (1957) was the first one to group verbs along the lines of event structure. He classified them into *activities, accomplishments, achievements* and *states*. The basic idea underlying this classification is how an event proceeds in time. For example, activity verbs such as *pet the cat* or *smile* have an actor who is doing

something (i.e. *petting the cat* or *smiling*) for an unbounded time interval. Similarly, states such as *know* or *love* don't include an endpoint in their basic denotation. In contrast to activities, states have no agent who is doing something (that is, there is no active *knowing* or *loving*). Achievements and accomplishments, on the other hand, include an endpoint. For example, an achievement like *reach the top* is not homogeneous like a state such as *love*. It denotes a sudden change from a state in which the subject is not at the top to a state in which the subject is there.

Michael Vince one of the most famous linguist describes a state as a situation in which “something stays the same” (1998, p. 7). Examples are here; *know*, *believe*, or *understand*. These verbs can be used in simple and perfect tenses. However, they are not used in any progressive form. This makes these verbs a little more difficult for students, which means that practice is essential. It should be note that verbs of senses should be modified by adjectives.

Consider the following examples:

A. Even from a distance, Ethan's pace **looked quick**.

B. *Even from a distance, Ethan's pace **looked quickly**. (Wrong)

A. This soup **tastes delicious**.

B. The soup **tastes deliciously**. (Wrong)

Samples mentioned above usual case for native speakers of English, the impulse to pair verbs of perception with adjectives is instinctive; adverbs sound completely wrong in their place, while foreign learners, who are constantly reminded that grammar rules in English require verbs to be modified by adverbs in most cases, find it difficult to pair perception verbs with adjectives.

Another interesting finding mentioned by Jim Miller pointing out those stative verbs “cannot be used to answer the question “What happened?” (2002, p. 143).

The following examples clearly show that:

a. What happened? Susan **went** into the station and **bought** a ticket

b. What happened? *They **believed** his parents.

c. What happened? *They **were** very happy.

The answer to the question in (a) contains the verbs *went* and *bought*, which are dynamic and describe actions. *Believed* in (b) and *were* in (c) both relate to states and are not dynamic but stative. Stative verbs cannot occur in WH questions, that is cannot be used as following:

What she did **was know** this theory.

Another characteristic of stative verbs is that this type of verbs is rarely used in the imperative as in the following examples:

a. **Belong!**

b. **Love me!**

McArthur (2009) notes out that (a) is not acceptable but example (b) is occasionally acceptable.

RESULTS AND DATA ANALYSIS

N	CLASSIFICATION OF ERRORS	TOTAL NUMBER	PERCENTAGE OF ERRORS

1	APPEARENCE	3	17,6%
2	EXISTENCE	2	14,6
3	FEELINGS AND EMOTIONS	3	17,6%
4	MENTAL PROCESS	4	23,5
5	POSESSION	4	23,5
6	VERBS OF SENSES	5	27,5

The table drawn above shows that errors frequently appear in the choice of using verbs that can be used as stative and dynamic, depending on the context they appear in the groups of verbs of appearance; verbs, describing mental processes and verbs of senses. These verbs require more practice as they seem to be the most challenging to learners as there is no strict grammar rule. Students need to consider each situation in detail. However, by paying careful attention, they can learn to use these verbs correctly, thus avoiding errors.

Errors made by the students are as follows:

I. Verbs with different meanings.

Students make mistakes failing to notice the different meanings of the respective verbs. Consider the following examples:

- A. She's having fun. (to have fun = to enjoy oneself)
- B. She is having a party at her flat on Saturday. (to have a party = to organize a party)
- C. They've been seeing each other for a month. (to see = to date)
- D. I'm seeing two politicians for a meeting tomorrow. (to see = to have an appointment with)
- E. He is seeing his doctor next week (to see = to visit, consult)

II. Verbs which are used to talk about a short period of time or describe something temporary as in:

- A. Diana is being very tired this evening. (*to be* is used as a dynamic verb expressing a temporary state)
- B. Stop doing that, Bill! You're being very silly. (=You are behaving badly / you are acting badly at the moment.)

III. Verbs which express an activity or process.

- A. My little daughter is smelling the flowers. (activity)
- B. Why are you smelling the soup? (activity)
- C. It smells awful.
- D. I'm tasting the meal. (activity)
- E. This sandwich tastes delicious (=it has a delicious flavour).

The sentences indicate that the subject is performing the action. The examples put an emphasis on the fact that the verbs of senses when used in their progressive form describe a volitional process. On the other hand, in 15(b) and 16(a) the verbs *smell* and *taste* describe the person's awareness of the quality of what is smelled or tasted. Regarding *smell*, "the two types are based on the verbs *smell* (inhale an odour) and *emit* (smell

IV. Verbs used to emphasise something

- A. I'm liking it! = I'm (really) enjoying it. (emphasis)

The last example (not very common in British English) demonstrates only 2 errors made by the learners and is included in the study simply because learners often ask about the use of this verb in the advertising slogan of a well-known fast food chain. **Conclusion**

The information outlined in the article can facilitate the comprehension of the linguistic peculiarities of dynamic and stative verbs in English. The theoretical aspect provides a brief, comprehensive classification of the types of verbs. The analysis shows the different meanings that the verbs express and the ways in which they change according to the specific context and the concepts associated with them.

REFERENCES

1. Antonia Rothmayr, 2003 "The Structure of Stative Verbs"
2. Evans, V. (2014). FCE use of English 1. Newbury: Express Publishing.
3. Hewings, M. (2005). Advanced grammar in use. Cambridge: Cambridge University Press.
4. Hopkins, D., & Cullen, P. (2007). Grammar for IELTS. Cambridge: Cambridge University Press.
5. McArthur, T. (1998). Stative verb. Oxford: Concise Oxford Companion to the English Language.
6. Miller, J. (2002). An introduction to English syntax. Edinburgh: Edinburgh University Press.
7. Nedelcheva, S. (2019). How seeing is different from looking? A cognitive perspective on verb-particle constructions with look and see. Studies in Linguistics, Culture and FLT, Vol. 7. Sofia: Asenevtsi, 7-21. <https://doi.org/10.46687/SILC.2019.v07.001>
8. Nedelcheva, S. (2020). Exploring smell from cognitive perspective in English and Bulgarian (a corpus study). Studies in Linguistics, Culture and FLT. Sofia: Asenevtsi, upcoming.
9. Norris, R. (2013). Ready for first. London: Macmillan Education.

TEACHING CULTURE AS A SUBJECT OF PSYCHOLOGICAL AND PEDAGOGICAL RESEARCHES

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ABSTRACT

Teaching culture as a subject of psychological researches is analyzed in this work. The authors compare basic approaches to the definition "teaching culture" content, detect the terms which are semantically related with it, open its heuristic role, correlate the views to the teaching culture functions and its structural and functional connections. The article contains the description of this phenomenon levels analysis, directions, conditions and ways of its development.

Key words: *teaching culture, national system of education, psychological and pedagogical researches, level system of foreign language education.*

INSTRUCTION

Social and individual development is inevitably connected with the cultural development problems. Education is a component of the culture in the whole, social and cultural institutions and important today. The problem field of psychological and educational research covers all aspects of new culture. There is a growing tendency to include educational activities in the cultural context of its correlation with cultural values. As the result of various aspects of culture and education interaction understanding, the analysis of teaching culture as the subject of psychological and educational research is also relevant.

The teaching culture analysis needed to identify the areas of the definition in the conceptual and categorial apparatus of socio-humanitarian disciplines. The term «teaching culture» can be found in the documents of international and national importance. So, in 1997 it was used in the Hamburg Declaration of Adult Learning. The participants of the V International Conference of Adult Education said: «We are determined to ensure that learning throughout life has become more significant reality at the beginning of the XXI century. We commit ourselves to promoting the teaching culture through movement «Every one hour of learning» and the Week of the United Nations, dedicated to adult education». [3].

In the Russian Federation, the concept of "teaching culture" was used in 2009 by the Minister of Health and Social Development of Russia T. Galikova in her speech on the National Meeting of Health center organization. The Minister highlighted «the teaching culture» is hygiene skills" among the factors that determine healthy life. [4].

Depth studies of the teaching culture were not found. However, it was devoted to some of the major pedagogical work: in 2002 N.B. Krylov the Institute researcher of Russian Academy of Pedagogical Innovation Education opposed the term «teaching culture» to the term «educational technology». Along with the term «teaching culture» as the researcher uses the term «educational culture» and «culture of learning». N.B. Krylov believes that the term «teaching culture» provides the basis for the new, wider view of education. Teaching culture author refers as a «culture of educational activity». N.B. Krylov declares that the teaching culture and the culture of learning activities' problems become, as key concept for the school development, the fundamentally different and changing nature of modern education. Focusing on teaching culture and students learning activities deepen the content of educational processes, where cultural norms of self-education student,

co-adults and children, and self-government begin to work. Educational processes can always be represented as expression of different cultural patterns of children and a teacher interaction. [7, p.224]

I.E. Vidt, The Head of Social cultural Studies Department of Humanitarian Studies Institute in Tyumen State University (Russia), in 1999 in the article «Teaching culture: formation, content meaning», wrote that some scientists offer to isolate some particular kinds of cultures, training, education, communication, «a culture of parents and teachers» in pedagogical culture. [2]

In 2020, the problem of the teaching culture in the context of analyzing education humanization ways was studied by the corresponding member of the Russian Academy of Education, the member of the International Academy of Humanities Y. Senko: «... every lesson with students reflects the professional culture of this process as the result of the educational culture». [16, p.145] The author, as far as we understand him, is not writing about teacher individual (subjective) didactic culture, and the objective (of procedural) teaching culture, a teacher and co-soluble audience and develops their creators. «Especially in a teacher pedagogical culture, seminars, teacher and student's co-creation is mostly clearly expressed, their willingness to the mutual aid behavior, understanding friend's capacity and other manifestations of new pedagogical thinking» [16, p.145]. Highlighting the feature of the teaching culture, Y. Senko considers its shape, its environment and conditions of educational process co-creation.

PURPOSE OF THE RESEARCH.

The term «teaching culture» is widely used in comparative educational publications. Thus, the results of H.M. Daurova studies (Russia), German scientists E. Bulman, G. Rolfe, M. Stange believe that new teaching culture, students-oriented and self-conscious development of critical thinking is one of the strategic directions of the school system in Germany. [5]

In 2005 F. Ziyatdinova, the member of the State Council used the term «teaching culture» in the context of Russia's accession to the Bologna Process problem discussion «Countries that have already achieved higher educational standards (Germany, France, Japan, Singapore), are trying to give quality education of young people from all social strata. «The teaching culture is encouraged», when both children and their parents are interested in education and the labor market and society reward those who have excelled at it. [6]

The education system in England, Great Britain and Ireland are described by involving the «teaching culture», «Methods and teaching culture in the UK are impressive - for example, everyone is really ready to share their own knowledge, scientific information is available, their own opinions discussions are welcomed and encouraged». It is written that the teaching culture in the UK is «vulnerable to the traditional methods of implementation, prevailing for many decades and in fact- many generations». [19]

EG. Muromova, the graduate of St. Petersburg Academy of Postgraduate Pedagogical Education (Russia), examines the culture of learning foreign languages in the context of comparison of Russian and British language education experience. She concludes that «the phenomenon of English language lessons undergoes qualitative changes and it is considered However, the authoritarian positions of Russian teachers are still very strong and it will take time to transition to a new form of a lesson - the dialogue lesson, where the student's personality is no less important than the teacher personality». [13, p.438]

«Teaching culture and well-being» were the subjects of 2005 analysis of the seminar "Finland in the study PISA: factors responsible for the results».

THE LEADING IDEA OF THE STUDY.

The difference between teaching cultures is described, comparing various religious educations.

Authors of psycho-pedagogical work outlined main features of teaching culture. Thus, the concept of "teaching culture" is often associated with the effectiveness conditions analysis of the pedagogical process. According to S.V.Filatov's opinion (Russia), «positive teaching culture allows you to move from functioning school to developing one». [18] In 2005 H.I. Buggenhagen, the manager of Innovation in Vocational Education (Germany), taking part in International Forum «Education for Sustainable Development: Towards Knowledge Societies», interpreted new teaching culture as a society sustainable development's prerequisite. [14]

The researchers refer to the teaching culture's communications with other kinds of pedagogical culture. S.V. Filatov (Russia) rightly links on its relationship with the school management culture. [18] Teaching culture was researched in 2003 by V.E. Mashchenko (Russia), analyzing the corporate governing system. [10] Frequently a study phenomenon connects with the communicative culture. Teaching culture is frequently interpreted as didactics, in its sense. Problems of learning foreign languages culture are also developed. [8] E.G. Muromova (Russia) examines the culture of learning foreign languages in the context of the state educational standards. [13]

Quite often, the term "teaching culture" is used in the context of information education's problems. According to the Bartelsman's foundations (Germany), in 2005 the education system will undergo changes due to the World Wide Web. A range of new proposals in the field of education will appear, there will be «new culture of teaching». [1]

Teaching culture is associated with active methods. So, A. Mogilev, professor of Moscow City Pedagogical University (Russia), in 2005 analyzing the problem of discussion and debate stimulation in the work of tutors, wrote: «Teaching culture through intensive training sessions, debates, discussions, is just beginning to take its shape». The author recommended developing such training culture program with the help of Intel «Education for future». [11]

High standards orientations on the training are common to all links in the Russian system of continuing professional education, V.M.Wilczynski, Deputy Chief of Education of Irkutsk (Russia), in 2005, noted: «... today we have to prove a kind of modern school - modern technology, good material base and high teaching culture ...» [20]

The authors put not only the problem of identifying ways and conditions for the teaching culture development, but also outline the criteria for this process effectiveness. So, E.E.Malyavkin (Russia), considering educational culture problems in the secondary school, considers high demands on students and teachers, focusing on adding value with the teaching of subjects, the use of modern teaching methods, continuous tracking of individual student achievement, clearly defined rights and obligations students a positive attitude to the personality of the child, taking into account its growth opportunities and interests, cooperation (joint venture) with the family as the criteria for the positive teaching culture. A teacher considers educational culture as one of the most important directions of becoming a positive teaching culture. [9]

Different specialists' categories address to the problem of teaching culture. Turning to the problem of business organization's culture building, some authors try to define the relevant concepts: «Teaching culture – is the degree where the organizational culture which supports change and use of new skills, makes significant impact on the learning implementation in the work environment». [12] Teaching culture is associated with the work culture and the culture of safety. In general, an interest to the teaching culture of business organizations,

probably, updates its value, shows its impact on the success of business activities and results. Education and teaching culture are treated as a valuable investment.

CONCLUSION

In conclusion, the analysis of literature and electronic sources shows that the term «teaching cultures» is used in documents of international and national importance. However, the deep researches of the cultural training phenomenon have not been conducted. In some relatively large pedagogical studies this term put in one line with the semantic concepts of «education culture», «culture of learning activity», and «culture of teaching». Closest in meaning to the term for the concept of «teaching culture» is the definition of «didactic culture». In this case, the teaching culture is presented more as a set of objective culture, while the term «didactic culture» often characterizes an individual, subjective culture. Teaching culture is considered as a special form of pedagogical culture. Teaching culture is sometimes contrasted with learning technologies. The concept of «teaching culture» has not received a specific definition of its content, but it was involved in the solution of many problems by the authors. Educational institution is often marked in the educational literature as the subject of teaching culture. The term is widely used in comparative educational publications. Different categories of specialists address to the problem of teaching culture. Business entities show great interest to this issue. Researchers recognize the relevance of the task of new teaching culture forming and development. It is often associated with the analysis of pedagogical process effectiveness conditions. Authors attribute teaching culture to the management and communication culture. Teaching culture is often treated in didactics sense. Quite often, the term "teaching culture" is used in the context of information education problems. Teaching culture is associated with its methods. This term is widely used as a «positive». Its research aim is to identify the criteria for a positive teaching culture, since the orientation of the developed teaching culture is common to all links in the system of education. The term «teaching culture» is used for educational institutions positioning in the education market. Teaching culture function is little known aspect of the problem. Study offers direction, policies and conditions of the teaching culture. Our further research connects with these and other issues' questions.

REFERENCES

1. Агзамов Ф. Образование в сети Интернет: развитие в мире и в Узбекистане [Электронный ресурс] / Ф. Агзамов // Информационно-коммуникационные технологии Узбекистана. – URL: <http://ru.infocom.uz/2003/11/21/>
2. Видт И.Е. Педагогическая культура: становление, содержание и смыслы [Текст] / И. Е. Видт // Педагогика. – 2002. – № 3. – С. 3-7.
3. Гамбургская декларация об обучении взрослых [Электронный ресурс] // Общество «Знание России», 2002. – URL: <http://www.znanie.org/dokumets/Hdecl.html>
4. Голикова Т. Выступление на Всероссийском совещании по вопросам организации работы Центров здоровья [Электронный ресурс] / Т.Голикова // Сайт Министерства здравоохранения и социального развития РФ. – URL: <http://www.minzdravsoc.ru/special/healthcenters/materials/0/?print=1>
5. Даурова Х.М. Исследования «Писа» в Германии - мониторинг качества образования [Электронный ресурс] / Х. М. Даурова // Этнопедагогика и сравнительная педагогика.

- Поликультурное образование. – 2004. – URL:
<http://www.ido.rudn.ru/rgp/Publication.aspx?publd=3298&rlid=9>
6. Зиятдинова Ф.В. Болонский процесс – с ворохом проблем? [Электронный ресурс] / Ф.Зиятдинова Время Деньги. – 2005. – 29 сентября. – URL:
http://www.tatar.ru/index.php?&page=1&node_id=1185&full=1574
7. Крылова Н. Б. Культура учебной деятельности [Текст] / Н. Б. Крылова // Школьные технологии. – 2002. – № 1. – С. 224-232.
8. Максакова С.П. Культура обучения иностранным языкам и обучение иноязычной культуре [Текст] / С. П. Максакова // Культура и язык: Материалы международ. науч.-практ. конф. – Самара, 2003. – С. 306- 310.
9. Малявкина Е. Е. Культурологизация образования в средней общеобразовательной школе [Электронный ресурс] / Е. Е. Малявкина // Культурология: науки о культуре – шаг в XXI век. – URL: <http://www.earthburg.ru/earthadm/php/process>
10. Машенко В.Е. Системное корпоративное управление [Текст] / В. Е. Машенко. — М.: Сирии. – 2003. – 251 с.
11. Могилев, А. В. Анализ чата для тьюторов программы «Обучение для будущего» [Электронный ресурс] / А. В. Могилев. URL: www.iteach.ru
12. Модель внедрения обучения: Подход повышения эффективности обучения, основанный на эмпирических исследованиях [Электронный ресурс]. – URL: <http://www.wlr.ru/ru/stati/info/239>
13. Муромова Е. Г. Государственный образовательный стандарт и культура обучения иностранным языкам [Текст] / Е. Г. Муромова // Диалог культур и цивилизаций в глобальном мире: Международные Лихачевские научные чтения. – Москва: СПбГУП, 2007. – С. 437-439.
14. Образование для устойчивого развития: на пути к обществу знания [Электронный ресурс]. – URL: <http://www.forum-2005.bsu.by/program/>
15. Пинский, А. А. Эффективная школа [Текст] / А. А. Пинский // Завуч. – 2000. – № 1. – С. 135-138.
16. Сенько, Ю. В. Гуманитарные основы педагогического образования [Текст] / Ю. В. Сенько. – М.: Академия, 2000. – 240 с.
17. Трушкина Л.Ю. Научно-исследовательская деятельность как основа опережающего характера профессионального образования и подготовки творческого специалиста [Электронный ресурс] / Л. Ю. Трушкина // Педагогическая наука и образование в России и за рубежом: региональные, глобальные и информационные аспекты. — 2005. – Вып. 5. – URL:
http://rspu.edu.ru/university/publish/pednauka/2005_2/05Trushkina.htm
18. Филатов С.В. Комплект формализованных документов, обеспечивающих участие педагогического коллектива в управлении школой [Электронный ресурс] / С.В. Филатов // Управление школой. – URL: <http://festival.1september.ru/articles/213546/>
19. Чапаев Р. Терпим Лондон в обмен на знания [Электронный ресурс] / Р. Чапаев. – URL:
http://www.parta.org/wa/news_ea/spool/news/632.htm
20. Материалы круглого стола [Электронный ресурс] // Приемная комиссия. – URL:
<http://pressa.irk.ru/index.php?id=53&n=475&p=12468>

FEASIBILITY ANALYSIS OF CANAL TOP SOLAR-HYDRO PLANT BASED HYBRID GENERATION

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ABSTRACT

With Increasing Energy demand throughout the world and limited availability of fossil fuel resources, there is a need to tap into non-conventional sources of generation. Renewable sources provide green energy and can be scaled up according to the availability of resource and demand of energy. Standalone Renewable Energy sources (RESs) like Wind Power, Solar Power etc. are subjected to intermittency and variability. A Hybrid plant of RES PV and Hydro plant can provide flexibility and Stable Power Supply. This Paper presents a model for study of Hydro PV Hybrid and further a software based Economic and Technical feasibility analysis of hydro PV Hybrid Plant is carried out. Through this study we analyse feasibility of a Solar-Hydro Hybrid plant and Techno-Economic aspects of Power Generation of a specific Hybrid plant with a case study on a specific existing Hydro plant with focus on maximum efficiency, less water usage and successful fulfilment of unit Commitment for Local Load. ETAP and Homer Pro software's are used for analysis.

Keywords: - Solar Canal, Micro-hydro, Grid Tied Inverter.

INTRODUCTION

With blooming global economies, power demand is continuously rising. Parallel efforts are being taken to shift towards renewable energy sources for power generation (especially photovoltaic and wind power). Photovoltaic and wind power are highly intermittent and unstable when operated in standalone mode. Ideal choice is to compensate with variable nature of such sources by integrating it with existing flexible generation infrastructure such as Hydro-Electric plant which can provide flexibility to deal with such variations.

Since last few years, Northern parts of Maharashtra state have been frequently experiencing severe draught condition during summer. Various Micro hydro plants are operated on irrigation canal network. These plants work on, at its peak generation capacity during rainy season due to excess water while during summer season they operate on irrigation water outlet because of scarcity of water in the region.

Nature of Photovoltaic plant is a total conjugate to the Micro-hydro plant, PV plant are stable during summer while are subject to variation during cloudy and rainy season. Introducing photovoltaic plant to work in conjunction with micro-hydro makes the system more robust. To decrease cost of Transmission and capital cost, PV plant needs to be placed as close as possible to the Micro-hydro so as to use existing infrastructure e.g. Transformer to inject power to the grid.

As these Micro-Hydro Plants are located on irrigation canals, instead of placing PV plant on the neighboring land, PV Panels are mounted on irrigation canal in a Novel concept called Solar Canal which reduces Land Acquisition Cost and uses dead Space above the canal. Discrete Mathematical Simulation based optimization approaches are highlighted by (Jurasz & Ciapala, 2018), this research also takes water retention rate as a constrain, which is an important factor when the surface area occupied by the panels above water reservoir is large. Continuing the approach of above authors, in (C.Bendib, 2019), the authors introduced a different topology consisting of Renewable sources as Primary source and pumped hydro plant as storage system, adding energy storage to a hybrid system, increases its reliability and system stability, but overall cost of system and the

complexity of system increases multiple folds. The Breakeven index considering ROI for such a system may take longer span as the Net present cost during commissioning itself will be high.

Also recent studies have been carried out by (Zilong Yang, 2010) on grid operation mode; various algorithms to ensure stable operation of grid connected micro hybrid were explored. Further a Hybrid topology of Grid integrated system is developed by (Sweeka Meshram, 2013), this research study focuses on synchronization of renewable source with an existing hydro plant, but is less efficient as there are converters for each source separately, i.e AC source of Hydro is first converted to DC and then again to AC to sync both the sources. Recent Classifications, evaluation indicators and various sizing methodologies of Renewable hybrid plants are explored by (Jijian Lian, 2019).

An in-depth Modelling and multi objective modelling is pursued in reference (Fang-Fang Li, 2015), the methodology developed is generalized in nature, hence can be used in study of any specific hybrid plant.

PROPOSED HYBRID MODEL (HYDRO-PV) CASE STUDY

Case Study: -Hanuman Sagar Dam:

Wan Hydro Project Located in a hydro plant located on Hanuman Sagar dam, in Akola district of northern part of Maharashtra. A network of canal is established to deliver water to nearby farmlands. The annual generation capacity of the hydro plant is 4.174 Mus, the plant utilizes irrigation water for generation and is active 333 days round the year. Mean Rated Flow 7330L/S.

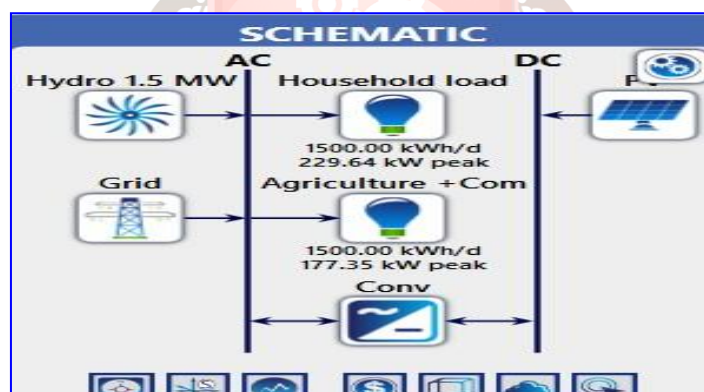


Figure1 Proposed Hybrid Model.

The System Consist of Existing Hydro plant supported by Grid, proposed system components includes PV Plant, DC Bus and a Converter. Local Loads is modelled by classifying broadly as



Household Loads and a combination of Agricultural load and community Load.

METHODOLOGY

Homer Pro Software and ETAP Software are used for Economical and Technical Feasibility analysis of proposed hybrid system. A simulation study based approach is followed, further optimization and modelling similar to generalized model by reference (Zilong Yang, 2010) is implemented on the existing plant of case study. Parameters taken for the analysis of solar are solar irradiation statistical monthly data along with average monthly temperature data for the specific location of dam and the canal pathway. Also a Model Similar to (Sweeka Meshram, 2013), is tested, with single current source controller and a grid tied PV Setup.

SOLAR IRRADIATION DATA: -

The Below Graph represents, available Solar Resource in location of study (Hanuman Sagar), the satellite data is imported through inbuilt resource mapping feature of (HOMERPRO, 2019). Software. Orange line on above graph depicts Clearness of sky and rain shadow region; cloud cover leads to significant drop in Photovoltaic based generation.

Figure 2. Hanuman Sagar –Wan Hydro plant geographic location

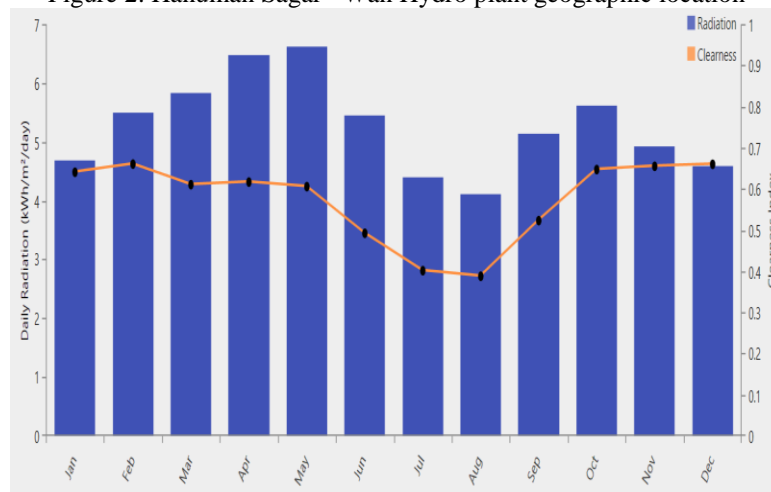


Figure 3. Solar Irradiation Satellite data

TEMPERATURE RESOURCE DATA

Temperature plays an important role in working of photovoltaic installations mounted on solar canal. Water evaporated from canals condenses on back of PV Panels, thereby providing passive cooling to the panels. Below graph represents the monthly statistic of the satellite data for the dam location.

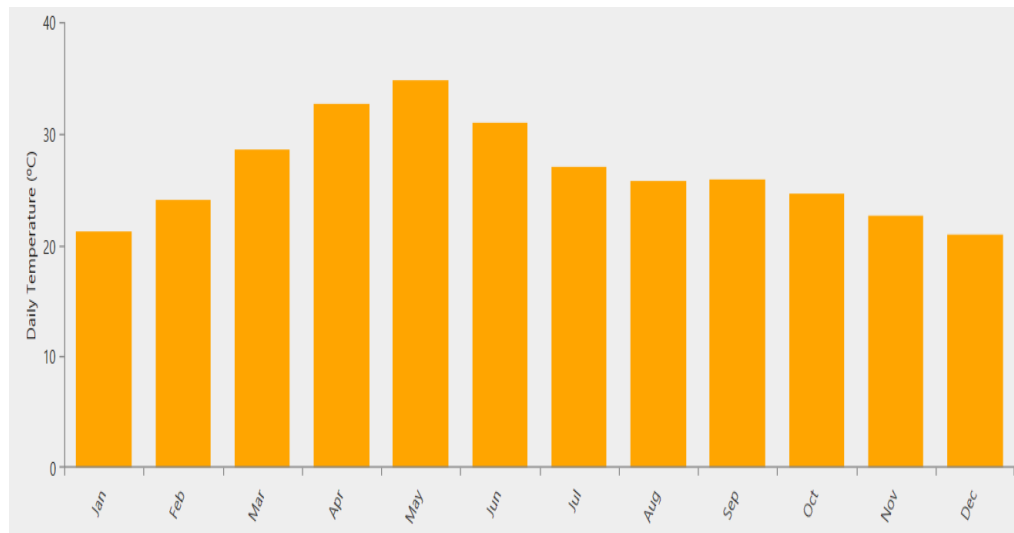


Figure 4 Temperature resource Satellite data

WATER RESOURCE DATA

The above Water Resource data shows the average flow rate round the year. The main canal includes water vent through spillway, water output from Power generation and irrigation water. Annually main canal of Wan hydroelectric project has rated flow rate of 7330 L/s. Flow rates decrease significantly during summer, and the water resource curve is replenished in rainy season.

Based on the data shown in figure 3, 4 and 5 simulation model is created and tested for the feasibility analysis.

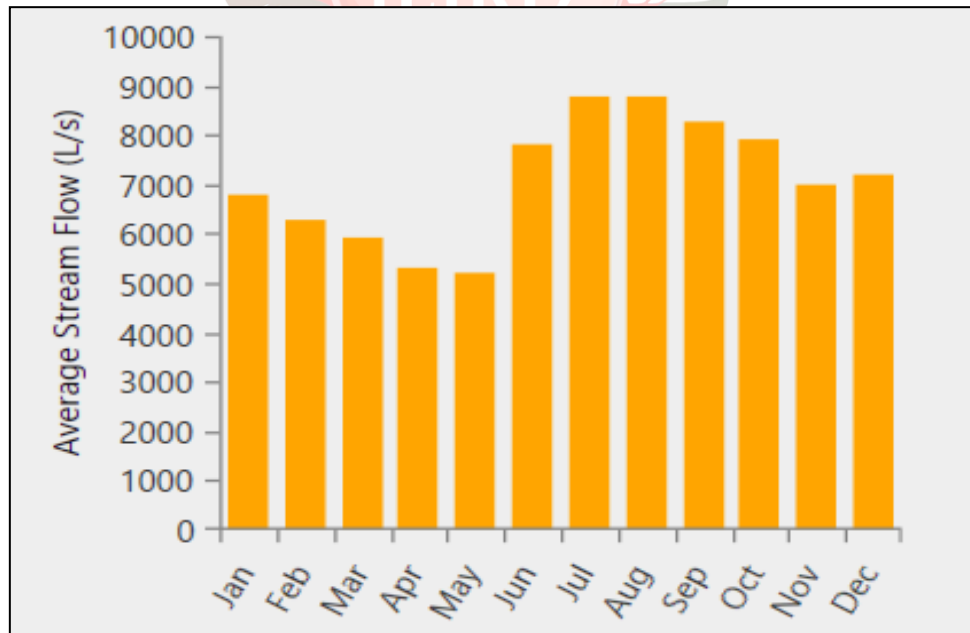


Figure 5 Monthly statistical data for water flow from dam

SIMULATION & TECHNICAL ANALYSIS ON ETAP SOFTWARE: --

Technical Analysis is carried by modelling proposed Hydro-PV Hybrid Plant and a model of Existing Hydro plant with grid support. Real and Reactive power flow is mapped throughout the network and the transactions with the grid and from proposed PV plant is metered.

HYDRO PLANT WITH PV AND GRID SUPPORT

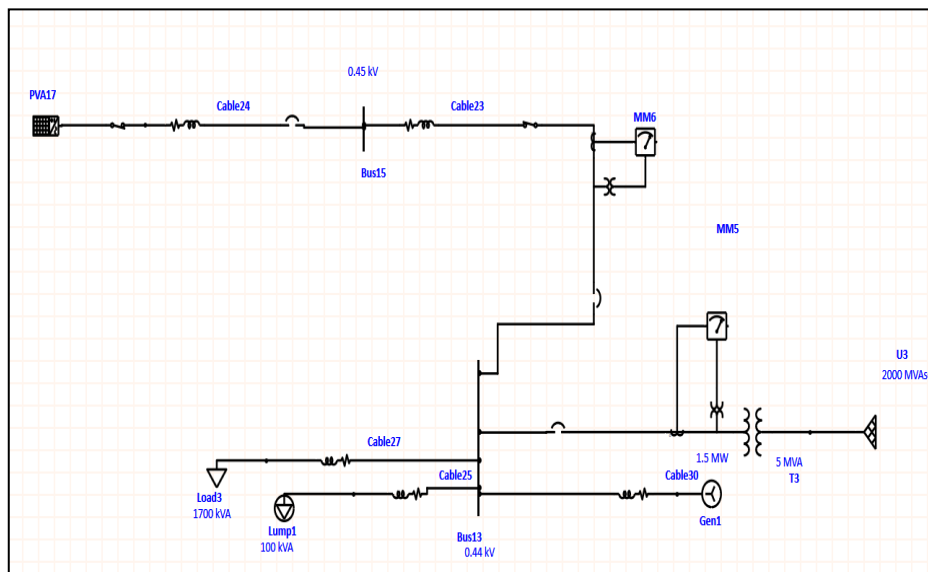


Figure 6 Single line diagram for hybrid plant

The SLD represented in figure 6 is the proposed Hydro-PV hybrid plant. The above model is developed in Etap software, the Model consists of photovoltaic plant, hydro plant, connected load, metering and protective devices. To monitor energy transactions from grid and hydro -PV hybrid, metering setup is installed in prime points of networks

HYDRO PLANT WITH ONLY GRID SUPPORT

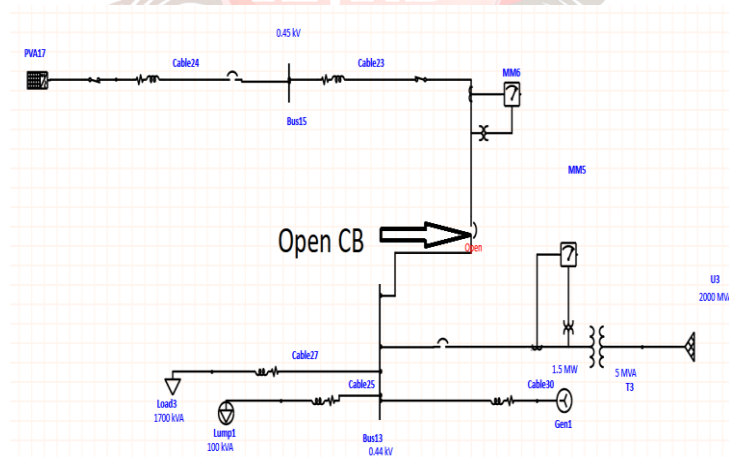


Figure 7 hydro plant grid support line diagram

Existing System of Case Study includes, Hydro power plant with Grid Support, the present Setup is modelled in Etap as above. Circuit breaker connecting Proposed PV plant to Main Bus is opened, such that the proposed part is isolated out of the main network.

RESULT AND DISCUSSION

Technical Analysis: -

The above modelled system, when simulated without PV array, requires to buy electricity from grid to meet existing local load demand, while the PV Array is connected back to the Model, the system sells excess

power to grid, hence turning the modelled system to a Grid connected self sufficient Micro grid. Which can transact with grid depending on the availability of the resource e.g. during rainy season, because of excess availability of water resource and Lower irradiation due to rain shadow /cloud cover, the system can run on existing hydro plant , conversely during summer , Generation through PV Panels can be prioritized using optimization algorithms.

Metering block modelled for above system manages the transaction with grid, generation through PV Panels, and Generation through Existing Hydro plant. The Hybrid System designed in this research study stands feasible and is in line with the results from case studies mentioned in literature. In Below Result, Red to Orange contour shows the load, green contours represent source. And blue contour reflects renewable source (I.e. PV source).

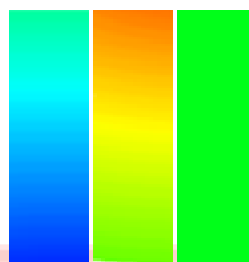


Figure 8 Blue:- Concentration of Renewable Generation.
Light Blue/Fluorescent Lower Concentration of Renewable Generation
Figure 9 Red/Orange: - Higher Density of Load
Light Green:- Lower Density of Load
Figure 10 Losses in conventional system

HYDRO WITH PV AND GRID SUPPORT

Hybrid simulation of PV- Hydro plant, shows, that Local Load demand is satisfied and excess energy is sold to the grid. With conjugate nature of both plants in hybrid, the proposed system is more efficient.

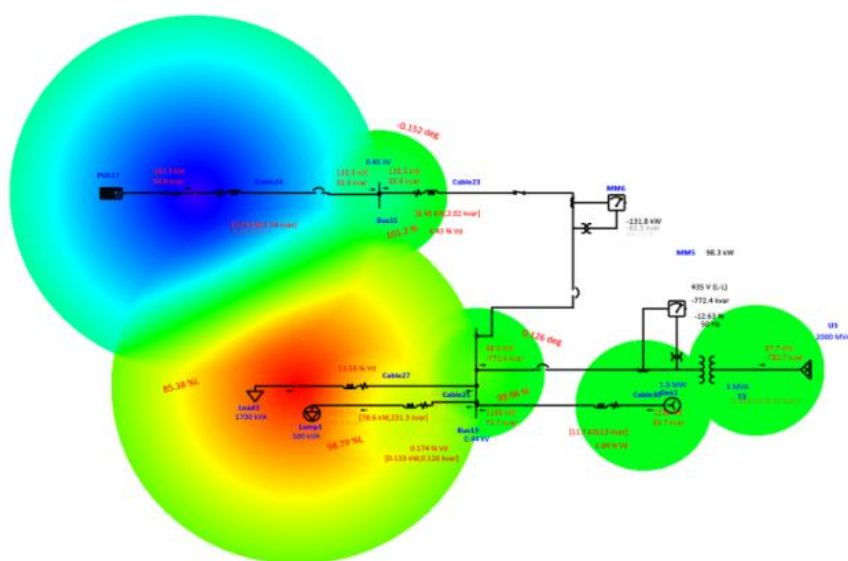


Figure 8. Hydro with PV and Grid Support

Local Generation shows better voltage profile as inverter itself can act as a Facts Device which can provide a better voltage profile and is provided with incentive by government as stress on Grid for reactive power management is considerably reduced.

HYDRO PLANT WITH ONLY GRID SUPPORT

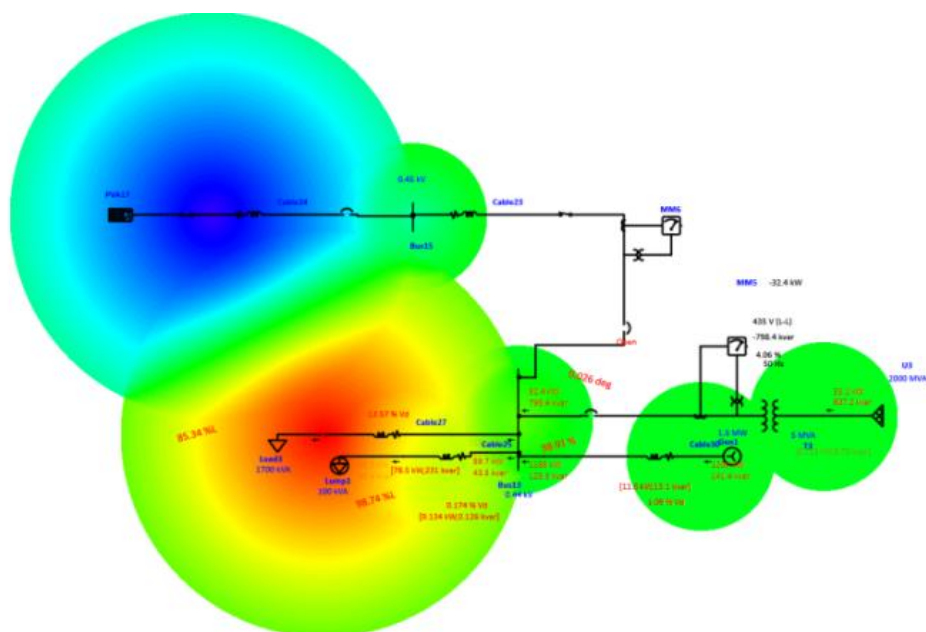


Figure 9. Hydro plant with only Grid Support

Above Result reflects that due to higher energy consumption rate, Hydro plant alone is not able to satisfy local load hence is supplemented by grid purchases. PV System is isolated from Main Bus using a Circuit Breaker. Metering Section and protection schemes are in normal operation and no overloading of cables or device is noticed, which is important as Local load is modelled with a concentrated point source.

Technical Profile of Proposed Hybrid Plant:-

Local loads are met with unit commitment with surplus sold to the grid, Load Profile consisting of Local Loads represented by concentrated Lumped load and static loads standing for community load and agricultural load are met with their unit commitment. PV plants generation reflects generation during day time, the curve represents an averaged out output, with spikes in minutes scale. Hence during implementation phase a suitable waveform trimmer may be required. During simulation study same cables/ protective circuits used before implementing proposed pv plant was used and no overloading of Cable/gear is recorded in simulation report.

ECONOMIC ANALYSIS:

Financial analysis of the proposed plant is simulated on Homer Pro Software

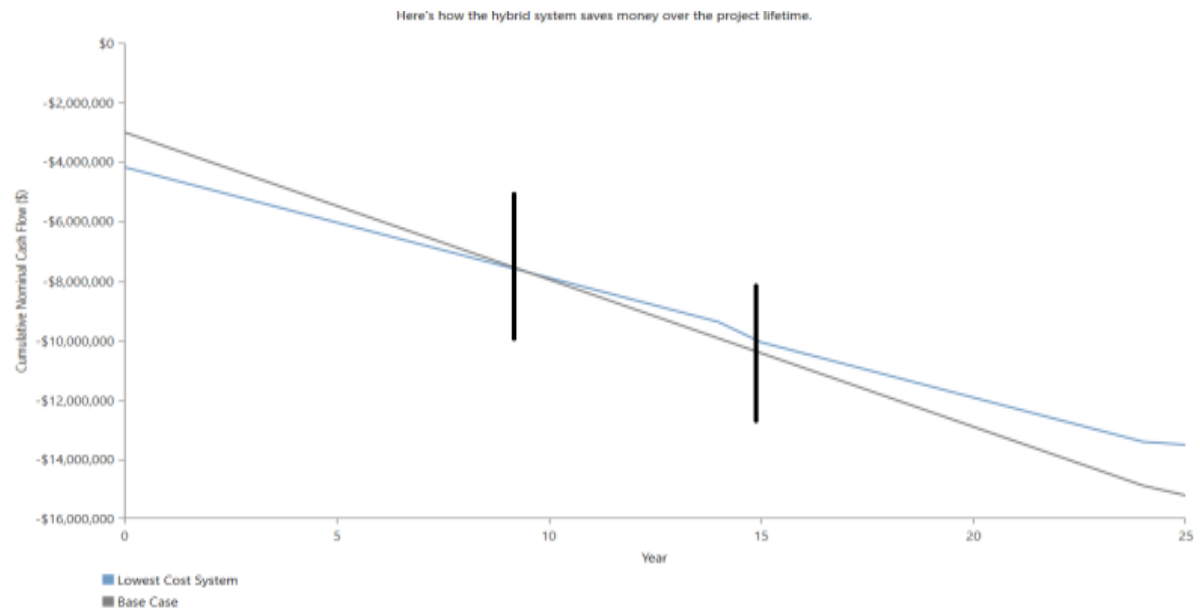


Figure 10 Economic Analysis

Even though NPC of the proposed system is higher than the base model, the simulation result reflects early break-even with trajectories of both models overlapping in 8 years and significant profit after 10 years. The operation and maintenance cost of base model is higher than the proposed plant. Converters are the weakest link in-terms of economy in-case of proposed plants. As converter failure may need replacement, hence in model replacement cost is considered.

Cost Summary

	Base Case	Lowest Cost System
NPC ⓘ	\$9.36M	\$9.05M
Initial Capital	\$3.00M	\$4.18M
O&M ⓘ	\$492,205/yr	\$377,030/yr
LCOE ⓘ	\$0.0647/kWh	\$0.0504/kWh

Table 1 Simulation Based Cost Summary

Base Case represents Existing Plant with grid support and proposed system is represented as Lowest Cost System. The cost of Energy is lower in case of proposed plant as it bypasses Grid side cost such as transmission line usage surcharge, lower maintenance cost due to conservative usage of distribution transformers connected to grid etc.

OBSERVATION

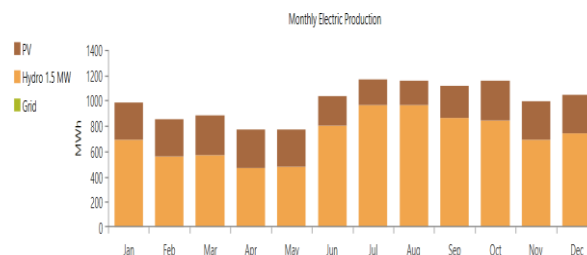


Figure 11 Electricity Production Rate

Hydro power in conjunction with proposed PV Plant satisfies unit commitment of local load and excess power is sold to the grid.

The amount retrieved through selling energy to the grid is not significant but the existing grid connection increases the reliability of the system as hydro- pv hybrid are conjugate sources of generation and in case of lower generation, grid acts as an added support.

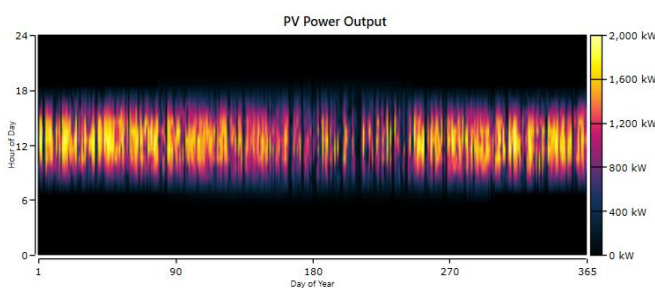


Figure 12 Daily PV Power Output

The Solar irradiation in region of case study, is high being in equatorial band, the above graph shows daily and annual Photovoltaic based power generation, daily the generation time ranges around 10am to 5pm while the irradiation satisfies the rated PV, fluctuation's are seen during rainy season as the region experiences cloud cover due to rain shadow region during June -august months.

CONCLUSIONS

Simulation data of proposed Hybrid system's successfully reflects fulfilment of per unit commitment and provides energy for lower COE. With the High Capital cost for initial installation of PV system (Photovoltaic panels/converters), and lower operational cost, leads to early break-even. And a Grid connection to Hydro -PV hybrid system increases system reliability. Additionally solar canals acts supports water retention and the canal water helps in cooling of PV Panels as temperature rises, evaporated water condenses on back of panel and Solar canal uses dead spaces for installation of PV Plant thereby leading to lower cost. Hence Solar Canal based Hydro-PV Hybrid with grid support is a viable option and will lead to penetration of renewable s into the main stream power system.

REFERENCES

- I. Jakub Jurasz, Bartłomiej Ciapała, "Solar-hydro hybrid power station as a way to smooth power output and increase water retention", Elsevier, Solar Energy Edition, Vol.173. pp 675-690, July 2018.
- II. Fang-Fang Li, Jun Qiu, "Multi-objective optimization for integrated hydro-photovoltaic power system", Elsevier Applied Energy, Vol. 167. pp 377-384, Nov 2015.

- III. He Li, Pan Liu , Shenglian Guo, Bo Ming, Lei Cheng, Zhikai Yang ,“Long-term complementary operation of a large-scale hydro-photovoltaic hybrid power plant using explicit stochastic optimization”, Elsevier, Applied Energy Journal, Vol. 238 ,pp 863-875,January 2019.
- IV. Bo Ming, Pan Liu , Lei Cheng, Yanlai Zhou, Xianxun Wang, “Optimal daily generation scheduling of large hydro–photovoltaic hybrid power plants” Elsevier , Energy Conversion and Management.” Elsevier- Energy Conversion and Management journal, Vol.199, n-112027, Nov.2019.
- V. Beibei Xua , Diyi Chen, M. Venkateshkumar , Yu Xiaoa , , Yan Yuea , , Yanqiu Xinga , Peiquan Li, April 2019 “Modelling a pumped storage hydropower integrated to a hybrid power system with solar-wind power and its stability analysis”, Elsevier Applied Energy ,Vol. 248, pp 446-462.
- VI. Jijian Liana, Yusheng Zhanga , Chao Maa , Yang Yanga , Evance Chaimaa, September 2019 “A review on recent sizing methodologies of hybrid renewable energy systems” Elsevier, Energy Conversion and Management Vol. 199, n-11207.
- VII. Ganga Agnihotri, Sushma Gupta and Sweeka Meshram, May 2013.” Performance Analysis of Grid Integrated Hydro and Solar Based Hybrid Systems”, Hindawi Journal, Advances in Power Electronics, 213.
- VIII. Zilong Yang, Chunsheng Wu, Hua Liao, Yibo Wang, Huan Wang , May 2010 “Research on Hydro/Photovoltaic Hybrid Generating System” IEEE 2010 International Conference on Power System Technology,203.
- IX. C.Bendib and M.Kesraoui, November 2019 “Wind-Solar Power System associated with Flywheel and Pumped-Hydro Energy Storage”, IEEE, International Renewable Energy Congress (IREC 2019).
- X. Sureshkumar,U., Manoharan, P. S., & Ramalakshmi, A. P. S. ,“Economic cost analysis of hybrid renewable energy system using HOMER”, International IEEE Conference in Advances in Engineering, Science and Management (ICAESM), 2012 , pp. 94-99.
- XI. Luis E. Teixeira, Johan Caux, Alexandre Beluco, Ivo Bertoldo ,José Antônio S. Louzada and Ricardo C. Eifler “Feasibility Study of a Hydro PV Hybrid System Operating at a Dam for Water Supply in Southern Brazil”, Journal of Power and Energy Engineering, 2015, 3, 70-83.
- XII. Kenfack, J., Neirac, F.P., Tatietsé, T.T., Mayer, D., Fogue, M. and Lejeune, E. (2009) Micro Hydro PV Hybrid System: Sizing a Small Hydro PV Hybrid System for Rural Electrification in Developing Countries. Renewable Energy, 34, 2259-2263.
- XIII. Glasnovic, Z., Rogosic, M. and Margeta, J. (2011) “A Model for Optimal Sizing of Solar Thermal Hydroelectric Power Plant”, Solar Energy, 85, 794-807.

PEDAGOGICAL SCIENCE AND ITS SPECIFIC IMPORTANCE IN THE EDUCATIONAL PROCESS

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ANNOTATION

The formation and development (maturity) of a person is the result of education, as well as the influence of heredity and environment, the rise of a person to the essence of man and the mental, intellectual, physical perfection of the human person. It is possible to form and develop a person through education, as a result of upbringing, and under the influence of heredity and environment. This process takes place throughout a person's life and shows the effect. This article discusses the science of pedagogy and its specific role in the educational process.

Keywords: *Pedagogy, educational process, education, knowledge, knowledge and skills, development, importance.*

We used the words "education", "upbringing", and "education" to describe the science of pedagogy. These words are interconnected and complementary. Thus, the main categories (concepts) of pedagogy are: Education, upbringing, education, personal development, school. There are also terms such as "student", "teacher", "method", "discipline", "heredity", "environment", "principal", "student", which are also pedagogical concepts.

Education is a process conducted under the guidance of specially trained people, equipping students with knowledge, skills and abilities, developing their cognitive abilities and shaping their worldview. Discipline is the systematic and systematic influence of the younger generation on a specific goal in order to educate them. Upbringing is a process that lasts from birth to the end of a child's life. Upbringing reflects the results of education and knowledge.

It is well known that the basic concept of pedagogy, the subject of education, is a social phenomenon. Education, which originated in the beginning of human society and has served the interests of humanity, provides a link between generations. Adults have passed on the experience they have gained in the course of their lives to the next generation. Experience, as a social phenomenon, is the formation of a person's personality, its preparation for life, and so on. Personality development is a complex dialectical process, in which the objective, subjective factors that affect a person are directed spontaneously and specifically (consciously).

The system of rules and customs that determine the cornerstone of education has been formed and developed. Not all forms of experience are part of the content of education. Because:

- First of all, there are physical, spiritual and moral obsolescence in any past experience.
- Secondly, due to the age of the trainees and the lack of both methodological and material basis, it is not possible to get all the experience gained, and so on. Most importantly, the content of education should be shaped by the socio-economic needs of society and the changes that are expected in the future. Whether we like it or not, every society needs its own education and creates such an education. It does not accept the harmful aspects of society, but struggles to eradicate it and seeks to find its own identity.

The basic concepts in the science of pedagogy, like the phenomena reflected in them, are inseparable from each other, they are intertwined, partially consistent with each other and interconnected in a single and whole pedagogical process. The existence of a apparatus of private understanding is an indispensable condition

for the separation and normal functioning of any science. Upbringing, education and teaching are the basic concepts of pedagogy as a science. Discipline is a type of social relationship in which one influences others in the same category in order to shape the individual in a focused way.

Pedagogy is a science of educational theory and art. The birth of a new person is only a birth. It is not a physical phenomenon. to become an active participant in the process, i.e. to be educated. Hence, upbringing is a constant and essential function of an ever-present society (life). It is a difficult and complex goal that can only be achieved through education. In order to solve this problem scientifically, we must rely on the scientific heritage of the great who have lived and worked in this field. On the social significance of education in society and in the life of every person, the great Uzbek pedagogue A. Avloni said: "Is described as This means that upbringing is a powerful force for us to achieve everything. In this case, it is necessary to understand the decisive goal of the educator. "Humanity has developed only because of independent study," said Spencer.

In the theory and practice of pedagogy, the basic concepts of pedagogical science are interconnected and form a single pedagogical process. They mainly consist of: knowledge, skills, qualifications, upbringing, information, and personality formation. Let's look at each of them separately:

Knowledge is the generalized experience of people accumulated in the process of social-historical practice. Or knowledge is the product of social-historical consciousness, the social-historical practice of mankind. Knowledge is a holistic set of scientific concepts about the laws of nature, society, thinking and methods of activity, accumulated in the process of active mastery of production activities by mankind, tested in practice and aimed at a deeper understanding and mastery of the objective world.

Education is one of the factors that shape a person. It is that people want to create and develop a certain situation in their pupils for a specific purpose by various means. Education differs qualitatively from other factors of personality formation in that the educator consciously sets a certain goal for himself and strives to achieve this goal and finds the means to achieve it. Thus, upbringing is a social relationship in which different people interact with each other in order to form in a particular direction of the individual.

CONCLUSION

The role of pedagogy in the system of human sciences is determined by the fact that it is correct to describe it as a science that applies the laws of development, formation, upbringing, education and teaching of the individual. The main categories of pedagogical science based on the above are interrelated and form a harmoniously developed person. Hence, it can be concluded that the process of upbringing is a universal national and social process that develops the individual abilities of each individual.

REFERENCES

1. Lobar Berdiyeva is a teacher at the Department of Pedagogy, Psychology and Education Management. On the upbringing of children and the work of coaches in the work of Abdurahmon Jami (adti.uz)
2. Musurmonova O. Formation of students' spiritual culture. T.: Science, 1993.
3. Yusuf Khos Hojib. Qutadg'u bilig / Knowledge that leads to happiness / - T.: Fan, 1971.
4. A. Boboxonov, M. Maxsumov. Abdullah Avloni's pedagogical activity. - T.: Teacher, 1966.

CONTENT OF THE DEVELOPMENT OF CREATIVE QUALITIES OF STUDENTS

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ANNOTATION

The article discusses issues such as not only relying on established connections as a result of training students' creative thinking skills, but also establishing new, meaningful connections in the brain, developing new ideas and stimulating new thinking. The criteria for the development of creative thinking are the content of knowledge, understanding, application, analysis, synthesis, evaluation.

Keywords: *creativity, professional activity, educational process, creative qualities, creative character, knowledge, understanding, analysis, synthesis, evaluation, logical thinking, creative sensitivity.*

INTRODUCTION

In order for students in the higher education system to have creative qualities, they need to think about new ideas, originality, initiative, which are different from the traditional approach in the educational process.

Consequently, a creative approach to the organization of the professional activity of future teachers with creative qualities, active in creating new, advanced, educational activities of students, ideas that serve to develop personal qualities, independent study of advanced pedagogical achievements and experiences, as well as pedagogical achievements with colleagues. focuses on gaining experience in brainstorming. Typically, students' creative abilities are ensured through the pursuit of problem solving, the implementation of research projects, and the achievement of mutual creative collaboration. The creativity of the student person is manifested in his thinking, communication, emotions, certain types of activities.

The main part As mentioned, creative qualities do not develop spontaneously in students, as in all individuals. Accordingly, there are a number of ways to successfully develop creative qualities. The first way is to develop creative thinking skills. The main emphasis is on the formation of creative thinking skills, students are focused on expressing the essence of actions of a creative nature using verbs. In particular, teachers pay attention to the presence of necessary verbs in the questions that encourage students to think in order to effectively develop creative thinking skills.

The second way - developing practical creative thinking skills. Educators use demonstrative methods and techniques in the formation and development of students' creative thinking skills. The use of questions here can only help in the short term, it does not develop interactivity and initiative in students.

The third way - organization of creative activity processes. In this way, emphasis is placed on creative thinking in the process of solving problems and promoting innovative ideas. Although creative methods and techniques are not actively used in these processes, creative thinking occurs.

The fourth way - use of creative products. In doing so, the educator may ask students to create a presentation using Power Point or multimedia tools, for example, on "Modeling a Women's National Dress". In the process of preparing the presentation, students actively develop creative thinking skills. Students can fully demonstrate their creative thinking skills in a comfortable environment. If students have a sense of failure, fear, fear of misrepresentation, fear of criticism, in such a situation it will not be possible for them to effectively form or develop creative thinking skills. Creative thinking skills can be successfully formed in students only by making creativity a habit. In this process, the methods and tools used by them to assess the content of the topic and creative thinking skills are important.

As a result of practicing creative thinking skills, students not only rely on established connections, but also tend to establish new, meaningful connections in the brain, develop new ideas, and think in new ways. Just as it is possible to form any skill, it is also possible to develop a creative thinking ability or skill. This also applies to students, where working on creativity helps students think in an unusual way. However, inspiring and encouraging students to be creative depends on how qualified the teacher is. The teacher plays a special role in the formation of creative thinking skills in students. However, the teacher should create an environment in the classroom where students can feel free and share their thoughts and ideas. Students should be able to express their ideas and opinions in a variety of ways in an audience. In order to further activate the processes taking place in the minds of students, the established rules should go beyond the standards and move freely in answering various questions.

Creativity (Latin, "create" - to create, "creative" - creator, creator) means the creative ability of the individual, which characterizes the readiness to produce new ideas and is part of the talent as an independent factor. So, from a didactic point of view, creativity is the ability of a teacher to create new ideas, to go beyond the traditional scheme of thinking and make unique, original decisions.

Having creative qualities in students helps them to create new ideas that are different from the traditional approach to the teaching and learning process, not to think in the same mold, originality, initiative, intolerance of uncertainty. Consequently, a creative approach to the organization of professional activities of teachers with creative qualities, active in creating ideas that serve to develop new, advanced, future teachers, personal qualities, independent study of advanced pedagogical achievements and experiences, as well as constant, consistent pedagogical achievements with colleagues focusing on gaining experience in brainstorming creates self-creative ability.

Creative competence consists of the following interrelated parts.

1. Creative purpose.
2. Creative aspiration.
3. Creative construction.
4. Creative direction.
5. Creative expressive act.
6. Creative self-management.
7. Creative activity.
8. Level of creative aspirations.

The creative thinking of students emerges and develops in his creative activity.

Stages of formation of creative thinking

Stages	Contents
Creativity based on natural possibilities	Represents the specific behavior of an individual
Primary (general) creativity	A general ability to demonstrate a person's creativity (it is manifested at the age of 3-5 years, and is clearly expressed in his actions at the age of 6-7 years)

Specialized creativity	Ability to express creativity in a particular type of social activity (according to which, based on the experience of professional and creative activity, under its influence, the overall creativity develops)
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A student with creative potential can demonstrate the following skills:

be able to determine the nature and significance of the task;

be able to analyze the problem statement;

development of a plan to solve the problem;

effective methods of problem solving - analysis, synthesis, induction, deduction, comparison and their application;

be able to choose ways to solve the problem;

substantiation and re-examination of the correctness of the decision made;

Carrying out small research to solve the problem;

Formulation of evidence on the conditions of the solution of the problem, the course of the process and the generalization of the results of the solution of the problem.

Criteria for the development of students' creative thinking The content of knowledge, understanding, application, analysis, synthesis, evaluation was developed as follows.

Criteria for developing creative thinking in students

№	Criteria	Contents
1	Knowledge	Being aware of knowledge means mastering it, memorizing it, recollecting it.
2	Understanding	To think about knowledge, to observe, to master the logic of transition from theoretical to practical.
3	Apply	Apply knowledge in practice.
4	Analysis	To study a whole, a whole object, event and reality and process in detail, based on the available knowledge, to draw detailed conclusions.
5	Synthesis	Draw a general conclusion about a whole object, event, reality and process as a whole on the basis of individual, separate components based on the available knowledge.
6	Rating	Assessment of a person's theoretical knowledge and practical skills.

Analyzes show that students with creative thinking show the following.

Expresses ideas that other future educators may not have imagined, chooses a unique way of expressing themselves, sometimes asks irrelevant or unusual questions, enjoys tasks that remain open to the solution, prefers to discuss ideas based on concrete evidence, chooses an unconventional approach to finding a solution.

Based on these approaches, students' creative qualities emerge:

- creative orientation, ability to think logically;
- erudition, rich imagination;
- creativity and initiative, full demonstration of creativity;
- ability to reflect, rich in emotions;
- ability to take risks, speed of thinking;
- development of intuition, the ability to put forward original ideas;
- possession of innovative abilities, high artistic values;
- ability to make new decisions based on existing experience and knowledge.

CONCLUSION

In the development of creative qualities in students, firstly, teachers take a creative approach to the creation of curricula and study resources, focusing on the overall development and professional formation of students, and secondly, the ideological, scientific, visual, systematic, consistent presentation of educational information, taking into account the interrelationships between educational information, thirdly, the relevance of assignments to the age of students, their practical significance, purposefulness and preparation in accordance with the needs and interests of students, fourthly, the purposeful, consistent use of methods, tools and technologies to develop creative qualities, as well as the creative use of information technology in the organization of pedagogical activities, fifth, independent, creative, critical creative thinking skills are developed when students' creative abilities are stimulated and the teacher creates a friendly environment for students to work actively in pairs, in small groups.

REFERENCES

1. Ибрагимова Г. (2015). Педагогик инновациялар ёрдамида талабаларнинг креатив қобилиятларини шакллантириш. Замонавий таълим, 1(3), 50-54.
2. Drapeau Patti. Sparking student creativity (practical ways to promote innovative thinking and problem solving). – Alexandria – Virginia, USA: ASCD, 2014
3. Расулова З.Д. (2020). Дидактические основы развития у будущих учителей креативного мышления. European science, vol. 51, no. 2-2, pp. 65-68.
4. Rasulova Z.D. (2020). Conditions and opportunities of organizing independent creative works of students of the direction Technology in Higher Education. International Journal of Scientific and Technology Research. 9:3, pp. 2552-2155.
5. Rasulova Z.D. (2020). Pedagogical peculiarities of developing socio-perceptive competence in learners. European Journal of Research and Reflection in Educational Sciences. 8:1, pp. 30-34.
6. Расулова З.Д. (2020). Эффективность дистанционной организации процессов обучения в высшем образовании. Academy. 62:11, С. 31-34.

USE OF INTERNET RESOURCES IN LEARNING ENGLISH

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ANNOTATION

The article is devoted to the use of Internet resources in teaching/learning English. The Internet is an effective mean of motivation and optimization in learning foreign languages, and English in particular.

Key words: *information technology, linguistics, English, Internet resources, distance learning, the Internet.*

INTRODUCTION

Currently it is difficult to submit a foreign language learning without the use of information technologies. Knowing a foreign language, particularly English, gives a wide range of opportunities to join world culture, use the Internet resources potential. The development of computer information technologies (IT) contributes to globalization, strengthening international cooperation, providing online services. Currently, the role of information technologies is not just great, but colossal. In this regard, it seems relevant to examine the prospects and the possibilities of using Internet resources in educational purposes - to study English.

Using Internet technology capabilities, people who are thousands of kilometers away from each other successfully exchange information in real time. Modern IT is characterized by a high data transfer rate, compact electronic devices and availability. It is possible to expeditiously access electronic resources and search for the necessary information, which is important and sometimes even crucial. Many achievements of humanity such as books, museum exhibits, audiovisual content are duplicated on the network.

Obviously, for a modern man who studies English, Internet resources are of great importance, as they help to solve a whole range of tasks, among which there are:

- access to authentic information (texts, video and audio materials, etc.): sites of English-speaking newspapers (Washington Post, The New York Times), various portals (YouTube, BBC World Service, CNN WORLD NEWS, etc.);
- Online communication with native speakers: sites for studying and practicing foreign languages (Lingualeo, Italki, etc.);
- Online learning, professional training courses of foreign languages (webinars, distance learning, educational Internet portals);
- operational access to educational and reference information: electronic dictionaries, encyclopedias, educational benefits, reference books (for example, ABBY Lingvo, Multitran, Cambridge Dictionary);
- Translation of foreign language information for primary familiarization with the text (for example, online services like Yandex, Google Translator).
- Testing on language knowledge online (TOEFL, IELTS, audio tests, etc.).

The use of the Internet allows students independently and in rapid deadlines to find the necessary information in English. Moreover, the use of modern technologies allows students to actively enter into oral and written communication with native speakers via video links, webinars, sms chats and overcome such phenomena as a language barrier and cultural shock (author's translation) [1, 2].

Dictionaries are essential instruments in learning English. They contain plenty of useful information: different forms of verbs, usage of prepositions, synonyms and antonyms, stylistic features of lexical units. Electronic dictionaries are rather convenient than printed ones as they have pleasant graphic interface, which can be set up to meet the requirements of the user (the font size, highlighting, personal keyboard). This allows to search information effectively by various criteria. The convenience and availability of online dictionaries are that they can be used from any device connected to the network.

The Internet at the present stage is a powerful catalyst for mastering English, acting as a source of huge language and linguocultural material. The geographical remoteness of some settlements makes particularly relevant distant learning technologies, which allows to implement an individual approach, adjusting it with the consideration of professional and personal factors of learners.

Here are some examples of the possible use of Internet resources:

- search for text, graphic and audiovisual materials on a variety of topics;
- implementation of linguistic analysis of oral and written discourse of the English-speaking audience;
- organization of distance language courses.

In foreign language teaching, communicativeness, interactivity and autonomy of training are of great importance, as well as studying the language in the context of culture. The formation of intercultural competence is impossible without communication, and IT helps to simulate learning situations or implement theoretical skills in a real act of foreign language communication, including the participation of speakers of the language being studied.

The Internet creates a unique opportunity for students to enjoy authentic content (texts, audio and video recordings) and communicate with native speakers, that is develops a modern educational environment, which has many signs of natural(author's translation) [3]. Taking into account various factors, the learning process with using Internet technologies can be equally effectively implemented both in face-to-face and in distance learning(author's translation) [4].

In learning a foreign language, English in particular, a linguistic-cultural approach plays essential role, which assumes the study of a foreign language in a cultural and historical context, since the language is a reflection of culture and is continuously developing over time. Consequently, the student is developing a language, getting acquainted with the culture, mentality, traditions and customs of the respective countries, as well as with national literature and folklore. In this regard, Internet resources help to immerse in foreign environment and get the real experience of intercultural communication.

By virtue of belonging to the so-called "digital" generation, modern students actively use smartphones, tablets, laptops and other computer techniques(author's translation) [5]. They often have the level of advanced users, since from the very childhood they get used to working on various electronic devices. Accordingly, the computerization of the learning process of the English language is perceived by learners as something natural and does not cause psychological discomfort. This also testifies in favor of the integration of Internet technologies into language education.

The use of Internet resources stimulates the active cognitive interest of students, meets the requirements of the organization of an affordable educational environment, allows to build an individual educational trajectory, contributes to the increase in the effectiveness of the assimilation of the linguistic material, provides

students with the enlarged possibilities of obtaining language material in various formats and in a comfortable mode due to the automation of routine operations and objectification of knowledge control.

REFERENCES

1. Завьялова О.С. Проблема использования информационно-коммуникационных технологий при обучении иностранному языку: о задачах компьютерной лингводидактики. Вестник РУДН. Серия: Русский и иностранные языки и методика их преподавания. – 2014. – № 4. – С. 38–45.
2. Дмитриева Е.И. Дидактические возможности компьютерных телекоммуникационных сетей для обучения иностранным языкам. Иностранные языки в школе. – 2007. – № 4. – С. 22–26.
3. Макаревич И.Г. Использование Интернет на уроке немецкого языка. Иностранные языки в школе. – 2001. – № 5. – С. 40–43.
4. Фёдорова Г.И. Компьютеры и Интернет в обучении иностранному языку. Учитель. – 2003. – № 1. – С. 65–67.
5. Мильруд Р.П. Применение информационных технологий в обучении иностранным языкам и культуре. Вестник ТГУ. – № 5. – 2012. – С. 211–217.



SOCIAL PSYCHOLOGICAL CRITERIA FOR EARLY DETECTION OF PROFESSIONAL MOTIVATION IN THE IMPLEMENTATION OF EDUCATIONAL REFORMS (ON THE EXAMPLE OF SMALL SCHOOL CHILDREN)

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ANNOTATION

There are different methods of use for motivation. This serves as the leading force for all the actions of a person, but understanding how it works and that can affect it can be important in several ways. Motivation is a process that initiates, manages and maintains purposeful behavior. Whether it's taking a glass of water to reduce thirst, or reading a book to gain knowledge, it's something that will bring out your effort. In this article, the social psychological criteria for the early determination of professional motivation in the implementation of educational reforms (on the example of junior school children) are analyzed.

Keywords: *social psychological, professional motivation, determination, knowledge, educational reforms, cognitive forces, junior school children.*

Motivation includes the biological, emotional, social and cognitive forces that drive behavior. In everyday use, the term "motivation" is often used to describe why a person does any work. This is the driving force of human action. Motivation does not only mean that the actions, it also includes that manages and supports the actions that are directed towards this goal (although such motivations can rarely be directly observed). As a result, we often have to draw conclusions about why people do what they do based on observable behaviors.

Types of motivation. Different motivation is often described as external or internal:

- External motivation it is the result of an individual coming from outside and often includes rewards such as prizes, money, social recognition or praise.
- Internal motivations these are the motivations that come from within the individual, for example, to fulfill a complex crossword for personal satisfaction in solving a problem.

There are three main components of motivation: activity, perseverance and intensiveness. Activation involves making a decision to start an action, such as enrolling in a psychology class. Persistence is the pursuit of the goal, despite the presence of obstacles. An example of endurance may be attending more psychology courses to gain a scientific degree, but this requires a large amount of time, effort and funds. Intensity can be seen from the intensity and strength aimed at achieving the goal. For example, one student can go ashore without much effort, while another is constantly studying, taking part in discussions and taking advantage of extracurricular research opportunities. The first student lacks intensity, and the second one seeks his educational goals with greater intensity.

The level of each of these components of motivation can influence whether you achieve your goal or not. For example, strong activation means that there is a high probability that you will start pursuing a goal. Persistence and intensiveness determine whether you will continue to strive towards this goal and how much effort you will be able to achieve it.

All students will notice a change in their motivation and willpower. Sometimes it happens that you are fired and there is a high motivation to achieve your goals, at other times you may not even know what you want

or what you want or how you will achieve it yourself. The instinct theory of motivation predicts that behavior is stimulated by instincts that are persistent and innate patterns of behavior. Five psychologists, such as William James, Sigmund Freud and William McDugall, offered a number of basic human instincts that promote behavior. Such instincts can include biological instincts, such as fear, purity and love, which are important for the survival of the organism.

The adverse health effects of illicit drug use can be very significant, although this varies greatly depending on the specific drug, the combination of drugs consumed, the methods of intake, amount, and frequency of use. Among those who inject drugs, mortality is high due to overdose and associated medical complications since many drug users either share needles or use contaminated materials.

It suggests that it aims to engage in conduct that help students maintain their optimum level of arousal by encouraging them in engaging in education. A person with low arousal needs can engage in relaxing activities, such as reading a book, while those with high interests can be motivated by exciting, exciting behaviors such as motorcycle racing.

The purpose of this study was to evaluate the ability of a universal screening measure to identify students who might otherwise go undetected through a traditional identification paradigm (teacher referral for special education, child study team, or other school-based service provisions). Utilizing data from a cohort of third- and fourth-grade students, the differences between students referred and not referred for evaluation or intervention based on the different referral systems was examined. The ever-increasing body of evaluation literature shows links between social-emotional learning programs and improved outcomes in a wide range of areas that include teacher social and emotional competence, improved student behavior, and increases in student academic achievement.

CONCLUSION

The understanding of motivation to students is important in many areas of life, for example, from parents to the place of work. You may want to set the right reward systems to set your best goals and encourage others as well as increase your motivation. Motivational cognition and their implication are used in other aspects of marketing and industrial psychology. There are many legends here and everyone can benefit from knowing what works and what does not.

REFERENCES

1. Bradley, R., Doolittle, J., & Bartolotta, R. (2008). Building on the data and adding to the discussion: The experiences and outcomes of students with emotional disturbance. *Journal of Behavioral Education*, 17, 4-23.
2. Kratochwill, T.R., Albers, C.A., & Shernoff, E. (2004). School-based interventions. *Child and Adolescent Psychiatric Clinicals of North America*, 13, 885-903.
3. Walker, H.M., & Shinn, M.R. (2002). Structuring school-based interventions to achieve integrated primary, secondary, and tertiary prevention goals for safe and effective schools. *National Association of School Psychologists*.
4. Wigelsworth, M., Humphrey, N., & Lendrum, A. (2012). A national evaluation of the impact of the secondary social and emotional aspects of learning (SEAL) programme. *Educational Psychology*, 32(2), 213-238

**FUNCTIONAL SEMANTIC FIELD OF WORDS EXPRESSING COLOR AND IMAGE IN
ENGLISH AND UZBEK LANGUAGES****Tursunova Mashhura Avazbek qizi**

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ANNOTATION

This article presents information about functional semantic fields in general as well as demonstrates the distinguishing characteristics of those fields in Uzbek and English languages. Moreover, a number of various researchers' findings on the theme of language expressing color and image are discussed and developed throughout the paper.

Key words: *functional semantic field, colors, Uzbek language, English language, linguo-culture, image, religion, environment*

A variety of factors necessitate the study of the national and cultural characteristics of one of the eastern languages, Uzbek, and one of the major European languages in terms of mankind and world culture, English. To begin with, Uzbekistan and the United Kingdom have had a long intercultural discussion that has resulted in the formation of interethnic contacts in a variety of disciplines, including diplomacy, art, and literature. Second, the economic, political, demographic, and other aspects of these civilizations' growth allow us to claim that they have both shared characteristics and ethnographic uniqueness. Finally, from a linguistic standpoint, Uzbek and English are two distinct types: agglutinative and analytical, respectively, resulting in structural distinctions, particularly in their semantic systems.

Using the resources from the two linguocultures, we may investigate the national and cultural characteristics of native speakers' speech behavior and, as a result, discover similar and unique aspects in the operation of the functional-semantic field of attachment in the Uzbek and English languages.

The functional-semantic field of affection is one of the underdeveloped problems in modern linguistics of the languages studied, and no detailed coverage of the national-cultural characteristics of this field has been made within the framework of the English and Uzbek languages based on a comparative-typological analysis to date. The study of the national and cultural peculiarities of the functional-semantic field of attachment in the Uzbek and English languages is one of the key aims of this research.

The functional-semantic field is a system of multi-level language means (morphological, syntactic, word-formation, lexical, as well as integrated lexico-syntactic, etc.) that interact based on the commonality of their functions based on particular semantic categories. The functional-semantic field encompasses not only the basic systems of grammatical units, classes, and categories, but also the parts of their surroundings that correspond to the same semantic category. "Semantic field" is a phrase used in linguistics to refer to a group of linguistic units that are linked by a shared (integral) semantic property; in other words, they share a non-trivial value component.

We got an idea of the presence of common and national-cultural characteristics of the English and Uzbek forms of affection, which were reflected in the semantic structure of the functional-semantic field of derogation, after studying the materials collected as a result of familiarization with regional geography literature, explanatory dictionaries, and the use of information presented on Internet pages. Let us examine the main typological features of the English and Uzbek languages, as well as the distinctive features of their national

character, in order to determine the degree to which these features influence the nature of verbal communication and the communicative behavior of people in the two sociocultural environments under consideration. Because of their exposure to European culture, particularly Protestant culture, the British people have developed their own distinct national identity. The Uzbek people had their own distinct ethnic traits during the period, deeply influenced by Eastern culture and the Islamic religion. Both folk's speech reflects these national and cultural distinctive features in the display of sentiments with soft words or attitude toward loved ones.

The national-cultural aspects of the functional-semantic field of attachment were detected in the following groupings of terms in the languages under investigation: zoonyms, flora, bodily parts, food, celestial bodies, colors, national literary heroes and historical personalities, and so on. Representatives of the animal world frequently compare character, appearance, and human features, as evidenced by expressions of love and affection for loved ones and relatives in the studied languages (hen, calf, chicken, mouse, chick, duck, puss, dove, ladybird, bird, lamb, chuck / toychoq, b'ytalok, toylok, k'yzichok, kulun, arslon).

Moving on to the following section of this article, it's important to understand the key characteristics of color identification in Uzbek and English. According to Hays and Parkins (1970), there is a clear hierarchy of relative importance of color designations in the European linguocultural area, with white being the most significant and frequently used, followed by black, red, green, blue, yellow, brown, pink, purple, and orange (with slight variations in individual languages). After conducting a linguistic investigation, M. Ganikhodjaeva comes to the conclusion that black, white, red, blue, green, and yellow are the most active color adjectives in the Old Türkic, Old Türkic, and Old Uzbek languages (dialects). According to the author's estimates, black (qora in Uzbek) has the highest frequency of occurrence per 100 pages of text, with an average frequency of 18.8; oq (white) - equivalent to 15.8; qizil (red) - 6.89; ko'k (blue) - 3.5; yashil (green) and sariq (yellow) - 2.5. In the 3-volume ancient Türkic dictionary of M. Kashgari "Diwana lukat-at turik" we also find the following color names: aq 'white' (M.K. I, 257); kök 'blue' (M.K. I, 132), qara 'black' (M.K. I, 382); qizil 'red' 19 (M.K. I, 408); qonur 'brown' (M.K. III, 363); sariy 'yellow' (M.K. I, 374); jasil 'green' (M.K. Sh, 19).

As we can see from the examples above, each researcher defines primary colors and the number of colors differently, and there are variations in the division of the color continuum, which can be explained by the practical importance of distinguishing the corresponding color in a person's living and working environment. This means that a more detailed or, opposite, a more broad reflection of reality in the language is required in practice. It's also common knowledge that correctly translating (transferring) words of color designations from one language to another is difficult since there is no color designation comparable in another language for the color designation of one language. As a result, in Russian, Uzbek ko'k equates to blue and light-blue, while in English, just one word blue. In ordinary life, Uzbek people can not necessarily differentiate between blue and green: the term "ko'k", which means "blue," may also mean "green," though there are analogous words such as yashil, etc.

In general, the semantics of terms for color designations in the Uzbek and English languages have many distinguishing characteristics, but they are also common. In compared to the English language, the Uzbek language's semantic field of color names has the most layer-forming capabilities and various interpretations. The semantic closeness of hue identification terms in the two languages is also evident at the level of

phraseologically linked meanings. In these languages, the majority of phraseological units describe a person and, in most cases, indicate his negative characteristics.

REFERENCE

1. Frumkina R.M. On the method of studying the semantics of color designation - Semiotics and informatics, issue 10. BUTIUTU, 1978, pp. 142-162.
2. Vasilevich A.P. The study of vocabulary in a psycholinguistic experiment: On the material of color designation in lang. different systems / Ed. Telia V.N. ; Academy of Sciences of the USSR. Institute of Linguistics. M. : Nauka, 1987.- 140s.
3. Worf B. The Phonetic Value of Certain Characters in Maya Writing.- Cambridge, 1933
4. Maerz A, Payl M.R. Dictionary of Color, Mc. Graw-Hill, №Y, 1930.- 207p
5. Vasilevich A.P. Psycholinguistic significance of color words in different languages / Experimental research in psycholinguistics. M., 1982.



**FACTORS THAT INFLUENCE AND ELIMINATE INFORMATION AND
PSYCHOLOGICAL SECURITY IN ADOLESCENCE****Umarova Iroda Bakirovna**

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Annotation

The article talks about the negative impact of information attacks on the younger generation, particularly adolescents and society. Ideological political conflicts are regarded as emerging information risk factor in mass culture. Attention will be paid to the research of scientists who have studied information and psychological security. In adolescence, the factors that influence and eliminate information and psychological security were covered.

Keywords: *adolescence, information, information and psychological security, national Information Policy, Social Security.*

Deepening democratic reforms it is very important to ensure that people live on the basis of the existing rules and regulations, and the effects of information coming from different sides on this matter are constantly showing its impact. As humanity steps into a new information society, it seeks to look for new opportunities in the field of moralize the existing style of information space. The protection of readers from open information threats also encourages research into the search for new opportunities, which is considered urgent.

Five priority directions of development of the country in 2017-2021 of the president of the Republic of Uzbekistan in the strategy of actions "physically healthy, spiritually and mentally developed, independent thinking, loyal to the motherland, has a serious life defect is the education of young people. The provision of psychological security of information in the improvement of public policy on young people is the basis for combating foreign ideas. Socio-economic issues such as the adoption of the state policy on youth and the psychological support of their youth through this legal framework to ensure adequate working conditions for the younger generation are also considered important for their further decent life. The formation of a culture of information consumption by means of which it is desirable to use modern pedagogical and psychological achievements of influence on the personality of a teenager. Information can be described as follows "information is a set of information about individuals, subjects, facts, events, events, and processes, regardless of their source and form of presentation.

The priority task of educating the growing younger generation as a harmonious person is to prevent various external threats in this regard, it is important to be aware of the potential danger of information that can affect the consciousness of the individual, as well as the formation of information consumption culture, information psychological safety immunity. According to the state of January 2021, the number of global internet users around the world is 4. It accounts for 66 million or 59.5% of the Earth's population. Also 5.22 billion people use mobile internet, which is 66.6% of the world's population.

The influence of ideological and political contradictions is also drawing the younger generation into its domain. A political structure, or association, is an organization, about which the state seeks to change through various means is gaining momentum. Information psychological security is studied not only in psychology, but also in pedagogy, Sociology, Philosophy, Ethics, religious studies in different interpretations. Currently, dozens of studies are being conducted on the formation of ideological immunity in young people, as different methods

of protection from mass culture influences, as well as the influence of the media on the formation of internet - subordinated circulation, personality behavior.

The impact of open information systems on different countries is also diverse. This situation is connected with how the economic, information, spiritual capacities and policies of the countries of the world work. Given that 60% of our country is young, it is not difficult to notice the scale of this treatment. In order to reduce the negative impact of the severe processes taking place in the world on each country and to make a positive impact, it is necessary to have a deep understanding of the essence of this phenomenon, to study its features. This is evidenced by the fact that the behavioral changes of society are changing in the influence of information. From the point of view of the formation of information and psychological security in adolescence, one can draw attention to the following aspects. The type of leader in the type of adolescent activity:

1. Emotional-willed, spiritual experiences of every teenager;
2. The development of intelligence in adolescents;
3. To the factor of the socio-spiritual environment formed in society.

Information has not only gone beyond the limits of ideological, economic, ethnic, religious, form, but has also become the main form of politicized information attack, in which it is possible to exert as much influence and apply as much universality as possible. Analysis of scientific sources suggests that influence in the media has its own scientific concept, which is based on the teachings of "theory of individual and social relations", "identification and response to threats". Today, we are witnessing a struggle of alien ideas that possess the consciousness of young people of our country with an interest in everything that seeks to be in harmony with the world. We can confirm the younger generation on the basis of ideas based on humanism, upbringing in the spirit of love for the motherland, pure Islamic thinking. There are a lot of types of exposure, and the main thing is that they can be shown to be strategic, agile and tactical types. They differ from each other in terms of purpose and task. Threats can be directed to the political, economic, educational, environmental, military, social demographic spheres of society. The possibilities of information psychological security in adolescence can be considered on the following basis.

- The personality of a teenager has the appearance of a supple the process of development requires control of behavior.

- The desire to experience the support of others due to the fact that the teenager is experiencing the deepest period of the psychological crisis.

- Have discrepancies between the Real me and the ideal me.

REFERENCES

1. Decree of the president of the Republic of Uzbekistan on measures to ensure more effective organization of the process of acquisition of rights over land parcels and other immovable property as part of the South Caucasus pipeline expansion project more ... Collection of documents of the law of the Republic of Uzbekistan.-2017.y

2. Umarov.B, Kadyrov. He Is Karimov.X. Information and psychological security in open Information Systems:a textbook. T., 2012.-239. p
3. Safayev N.S., Ergashev P.S., Amirova N.A.,Odilova N.G.,Rahimova I.I, .Ziyavidtinova G. Z. The main criteria for psychological successand the legislation of development. Tashkent-2018. 166.p
4. Sharopova S. Socio-psychological basis of the formation of ideological immunity in young people. Monographs. Gulistan city 2020.144.p



THE ROLE OF PARALINGUISTIC MEANS IN SPEECH

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ABSTRACT

There is no doubt that establishing a good communication between students and the teacher introduces successful steps for both learning and teaching process. Communication is more than words, and it is important for teachers to understand the nonverbal messages they are sending and receiving in the classroom.

Key Words: *paralinguistic, english language, system, information, education.*

Paralinguistic means as an auxiliary functional system and independent secondary sign system. The definition usually emphasizes the sign of the presence and absence of verbal language. This is clearly expressed in the following statement: "Since the exchange of information is possible only with the help of sign systems, or - in the general theory of semiotics - languages, in all cases we are confronted with languages, but languages of a special kind. All of them unites disconnection, lack of words, therefore they are usually called non-verbal" regardless of the origin of such systems, the functioning of all such means of verbal language can be carried out indirectly and only on the basis of existence and possibility of explicit expression of the values of any gestures material of natural language.¹ In this case, all sign systems, including systems paralinguistic character (gestures, facial expressions), and any kinds of technical systems character (signs of traffic, various symbols), are sign systems secondary character, the significative purpose of which is predetermined in advance the conventional nature of their use. In other words, every phenomenon artificial sign system gets meaning only on the basis of language decoding and is a symbolic representative of some idea expressed in one form or another verbal language (fixed in the instruction, in the concept, in the oral agreement). This understanding of the communicative nature of artificial sign systems leads to conclusion that they are an extreme case in the general set of all Paralinguistic means. This part of the seemingly paralinguistic means goes beyond marginal phenomena and forms a completely independent system of sounds, which is subordinated to the general regularities of conventional semantic systems.

First of all, it is about pure conditional gestures of a national character that do not interact with any speech signal and, like any sound system, functioning as a normal code, for example, a gesture of solidarity - raising your hand with a fist clenched in your hand or gesture of threat - movement with the index finger, or in sports a whole system of conditional gestures, for example, when marking the "time out", breaking the rules, removing the player from the field, gestures of approval (applause). Such gestures are perceived as predetermined, or by a verbal act, and function as any codes, for example, rules signals traffic. All these gestures (including here and all kinds of ritual signs), naturally, should be excluded from the notion of "paralinguistic factor", and their study should be built out of the connection with the language structure, but only on the basis of their description thirty values, regardless of whether this value is fixed in the customs of this or that human collective and is fixed in written documents, agreements, protocols etc. Or this value exists by right of custom. If we consider paralinguistic means in accordance with their internal regularities, it is possible to reveal their semiotic character, since the functioning of these facilities is generally subject to the rules for the use of signals and various kinds of signs. In this case, each such semiotic system will have national features as characteristic features in a series of semiotic non-linguistic human resources. Here you

¹ Верещагин. Е. Вопросы теории – речи и методика преподавания иностранных языков. М., 1969. стр.66.

can indicate the different uses of the same gestures, for example, man to express consent, surprise, anger, etc.²

The paralinguistic has a certain semiotic meaning, as evidenced by research results in this direction, but at the same time typical, which is especially clearly revealed in the analysis dialogues in art works, where the author's explanations are based on certain paralinguistic phenomena. These include author's remarks: "ironing on the head, blocking the road, snaps his fingers, waving his arms, spreading his hands, shrugs his shoulders, nods, sways, twitches".³ However, when considering the interaction of the language with non-linguistic means communication gestures having a semiotic character of facial expression loses its properties in due to the fact that the use of these funds is not due to internal structure this system as a whole, and on the basis of compensatory interaction of linguistic and non-linguistic means when communicating people.⁴ The consideration of gestures and facial expressions can be aimed at finding semiotics regularities, but with the transition to the area of the relationship with the language structure. The semiotic character of these means loses its significance, since the main emphasis in this case should be made on the specific relationship of certain features of the language structure and paralinguistic means. For example, the movement of the head and the consent sign that has semiotic value in the discharge of the whole complex of human movements' defined nationality, when interacting with a speech utterance becomes a kind of an auxiliary element of this structure as a compensating link in relation to it. Some stereotyping of the use of paralinguistic in a certain collective is not means the alienation of the paralleling subsystems and their transformation into an independent semiotic system - it can only be a matter of removing arbitrariness in the creation and use of specific paralinguistic forms. These funds fulfill their functions participation in the formation of verbal information within the limits set by the team of norms. This was clearly expressed by Sh. Bally: "Gestures, postures and facial expressions are similarly certain and generally accepted meanings, as well as other signs of the language: it is indisputable that even with the assumption of individual forms of facial expression".⁵ It is the area of human body movement involved in the transfer of content utterances, and is the subject of paralinguistic.

REFERENCES

1. Rabinovich F.M., Sakharova T.V. Intensive teaching methods and high school. - Foreign languages at school, 1991, No. 1.
2. Merkulova I.I. The system of problem tasks in teaching reading // IYASH, 1991, No. 6.
3. Milrud R.P. Discussion of the problem in the lesson of a foreign language // IYASH, 1986, No. 4.
4. Mirolyubov A.A. Audio-lingual method // IYASH, 1995, No. 4.
5. Rabinovich F.M., Sakharova T.V. Intensive teaching methods and high school. - Foreign languages at school, 1991, No. 1.
6. Denisova L.G. The place of intensive methodology in the system of teaching a foreign language in high school. - Foreign languages at school, 1995, No. 4.

² Stepanov. Y.S .Semiotics. M., 1971;

³ . Birdwhistell. R.L Body motion research and interviewing. "Human organization", 1959,

⁴ Николаева Т.М. ,Б.А. Успенский. Языкознание и паралингвистика. "Лингвистические исследования по общей и славянской типологии". М., 1966.стр71

⁵ Sh.Bally, General Linguistics and Questions French language. M., 1955: p. 51.

7. Dianova E.M., Kostina L.G. Role-playing game in teaching a foreign language (review of foreign methodological literature) // IYASH, 1988, No. 3.
8. Theory of teaching foreign languages: Linguodidactics and methodology: textbook / ND Galskova, NI Gez.-6th ed., Sr.- M.: Academy, 2009.-333c.



TO PREDICT THE CHANCE OF HEART ATTACK USING LOGISTIC REGRESSION AND PERFORMANCE IMPROVEMENT USING DIFFERENT CLASSIFIERS

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ABSTRACT

Educational Data Mining is an emerging interdisciplinary research area that deals with the development of methods to explore data originating in an educational context. EDM uses computational approaches to analyse educational data in order to study educational questions. This paper surveys the most relevant studies carried out in this field to date. Firstly, it introduces EDM and describes the different groups of users, types of educational environments and the data they provide. It then goes on to list the most typical/common tasks in the educational environment that have been resolved through data mining techniques and finally some of the most promising future lines of research are discussed. With the overwhelming successes gained in Big Data analysis in the Business Industry, it is little wonder that there is a strong belief in the academia that these successes can be replicated in the Education Sector. As new findings and outcomes of research crop up daily, it is my belief that amongst these successes potentially identifiable, prediction of students' academic performance can have strong positive influences in knowledge management and delivery in education thereby adding more quality to the learning experience.

Keywords— Data Mining, Student Database Mapping, Prediction analysis, Educational dynamics of behavior

INTRODUCTION

Health care is coming to a new era where the abundant biomedical data are playing more and more important roles. In this context, for example, precision medicine attempts to 'ensure that the right treatment is delivered to the right patient at the right time' by taking into account several aspects of patient's data, including variability in molecular traits, environment, and electronic health records (EHRs). The large availability of biomedical data brings tremendous opportunities and challenges to health care research. In particular, exploring the associations among all the different pieces of information in these data sets is a fundamental problem to develop reliable medical tools based on data-driven approaches and machine learning.

A risk prediction model aims to predict the probability or risk of a condition or event among individuals, or occasionally groups, based on a combination of known or measured characteristics. Risk prediction tools are the means by which risk prediction models, scores or algorithms are implemented in clinical practice. Numerous risk tools are now available, which predict either current or future risk of a various diagnosis. In these works we have the potential to improve patient outcomes through enhancing the consistency and quality of clinical decision-making, facilitating equitable and cost-effective distribution of finite resources and encouraging behaviour change.

Recently, Figure no-1 shows the data analyst system with the increasing availability of a large volume of electronic health record (EHR) data, there is a gradual attention to use data-driven approaches to construct efficient tools for clinical prediction. Electronic health record (EHR) data from millions of patients are now routinely collected across diverse healthcare institutions. They consist of heterogeneous data elements, including patient demographic information, diagnoses, laboratory test results, medication prescriptions, clinical

notes, and medical images. However, it is challenging to create accurate analytic models from EHR data, because of data quality, data and label availability and heterogeneity of data types.

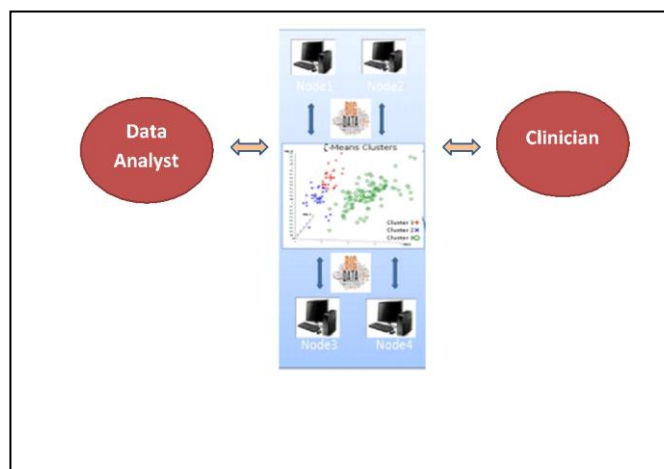


Fig-1: Data Analyst System

Traditional health analytics modelling often depends on labour intensive efforts, such as expert-defined phenotyping and ad-hoc feature engineering. The resulting models generally have limited generalizability across datasets or institutions. A common approach in biomedical research is to have a domain expert to specify the phenotypes to use in an ad hoc manner. However, supervised definition of the feature space scales poorly and misses the opportunities to discover novel patterns. Alternatively, representation learning methods allow to automatically discovering the representations needed for prediction from the raw data.

Deep learning methods are representation-learning algorithms with multiple levels of representation, obtained by composing simple but nonlinear modules that each transforms the representation at one level (starting with the raw input) into a representation at a higher, slightly more abstract level. Deep learning models demonstrated great performance and potential in computer vision, speech recognition and natural language processing tasks. Given its demonstrated performance in different domains and the rapid progresses of methodological improvements, deep learning paradigms introduce exciting new opportunities for biomedical informatics.

Until the last few years, most of the techniques for analysing rich EHR data were based on traditional machine learning and statistical techniques such as logistic regression, support vector machines (SVM), and random forests. Recently, deep learning techniques have achieved great success in many domains through deep hierarchical feature construction and capturing long-range dependencies in data in an effective manner. Given the rise in popularity of deep learning approaches and the increasingly vast amount of patient data, there has also been an increase in the number of publications applying deep learning to EHR data for clinical informatics tasks which yield better performance than traditional methods and require less time-consuming pre-processing and feature engineering.

The contribution of the proposed research is to design a machine-learning-based medical intelligent decision support system for the diagnosis of heart disease. In the present study, various machines learning predictive models such as logistic regression, k-NN, ANN, SVM, decision tree, Naive Bayes, and random forest have been used for classification of people with heart disease and healthy people. Oree feature selection algorithms, Relief, minimal redundancy- maximal-relevance (Mr MR), Shrinkage and Selection Operator (LASSO), were also used to select the most important and highly correlated features that great influence on target predicted value. Cross-validation methods like k-fold were also used. In order to evaluate the performance of classifier, various performance evaluation metrics such as classification accuracy, classification error, specificity, sensitivity, Matthews' correlation coefficient (MCC), and receiver optimistic curves (ROC) were used. Additionally, model execution time has also been computed. Moreover, data pre-processing techniques were applied to the

heart disease dataset. The proposed system has been trained and tested on Cleveland heart disease dataset, 2016. UCI data-mining repository the dataset of Cleveland heart disease is available online.

REVIEW OF LITERATURE

Review of literature refers to those research paper, publication, journals and articles which include finding of a researcher which can be theoretical or statically in nature on one particular topic, it is a secondary source of information and does not take into view any new finding. Here the researcher has taken the review of literature in India and abroad from various books and journals:

Wang, H [2014] he explained a comprehensive medical lexicon which supports the automatic lexical tagging process is indispensable. In this study, he manually extracted and encoded lexemes and their semantic classes in the clinical pathway specification published by the host hospital and merged them into the medical lexicon described in as our prototype lexicon.

LeCun Y [2015] they explained Deep learning methods are representation-learning algorithms with multiple levels of representation, obtained by composing simple but nonlinear modules that each transforms the representation at one level into a representation at a higher, slightly more abstract level. Deep learning models demonstrated great performance and potential in computer vision, speech recognition and natural language processing tasks

S. Bandyopadhyay [2015] he suggested the unique features and challenges of EHD, including missing risk factor information, non-linear relationships between risk factors and cardiovascular event outcomes, and differing effects from different patient subgroups, demand novel machine learning approaches to risk model development. Also, he explained a machine learning approach based on Bayesian networks trained on EHD to predict the probability of having a cardiovascular event within five years. In such data, event status may be unknown for some individuals as the event time is right-censored due to disenrollment and incomplete follow-up. He described how to modify both modelling and assessment techniques to account for censored observation times. They showed that the approach can lead to better predictive performance than the Cox proportional hazards model.

Liu et al. [2015] they used a four-layer CNN to predict congestive heart failure and chronic obstructive pulmonary disease and showed significant advantages over the baselines.

Choi E [2015] they incorporated medical interventions in the model to dynamically shape the predictions. DeepCare was evaluated for disease progression modelling, intervention recommendation and future risk prediction on diabetes and mental health patient cohorts. RNNs with gated recurrent unit (GRU) were used to develop Doctor AI, an end-to-end model that uses patient history to predict diagnoses and medications for subsequent encounters. The evaluation showed significantly higher recall than shallow baselines and good generalizability by adapting the resulting model from one institution to another without losing substantial accuracy.

Gulshan [2016] he has used CNNs to identify diabetic retinopathy in retinal fundus photographs, obtaining high sensitivity and specificity over about 10 000 test images with respect to certified ophthalmologist annotations. CNNs also obtained performances on par with 21 board-certified dermatologists on classifying biopsy-proven clinical images of different types of skin cancer over a large data set of 130 000 images (1942 biopsy-labelled test images).

NEED OF THE STUDY

When a patient is admitted to a hospital, there are two commonly asked questions: “what is happening?” and “what happens next?” The first question is about illness diagnosis, the second is about predicting future medical risk. Whilst there are a wide array of diagnostic tools to answer the first question, fewer technologies address the second. Traditionally, the prognostic question may be answered by experienced clinicians who have seen many patients or by clinical prediction models with well-defined risk factors. But both methods are expensive and restricted in availability. Modern electronic medical records (EMRs) promise a fast and cheap alternative. An EMR contains the history of hospital encounters, diagnoses, interventions, lab tests and clinical narratives. The wide adoption of EMRs has led to recent research to build predictive models from this rich data source. Answering prognostic inquiries necessitates modelling patient level temporal healthcare processes. Effective modelling must address four open challenges:

1. Long-term dependencies in healthcare: the future illness and care may depend critically on historical illness and interventions. For example, the onset of diabetes in middle age remains a risk factor for a person's remaining life; cancers may recur after years; and a previous surgery may prevent certain future interventions.
2. Representation of admission information: an admission episode consists of a variable-size discrete set containing diagnoses and interventions.
3. Episodic recording and irregular timing: medical records vary greatly in length, are inherently episodic in nature and irregular in time. The data is episodic because it is only recorded when the patient visits the hospital and undergoes an episode of care. The episode is often tightly packed in a short period, typically ranging from a day to two weeks. The timing of arrivals is largely random.
4. Confounding interactions between disease progression and interventions. Existing methods are poor in handling such complexity. They inadequately model variable length and ignore the long-term dependencies. Temporal models based on the Markovian assumption are limited to model temporal irregularity and have no memory, and thus they may completely forget previous major illness given an irrelevant episode.

OBJECTIVE

The main objectives of this study are:

1. To develop robust prediction models that can effectively handle high dimensional heterogeneous EHR data.
2. To accurately classify different clinical risks levels based on the acquired EHR data.
3. To develop timely and appropriate intervention strategies to those at high risk levels.
4. To estimate the chance of a unfavourable major event (such as death) during patients' hospitalizations

PROPOSED SYSTEM

The proposed system architecture divided into five stages including:

Pre-processing of dataset

Feature Based selection

Cross validation with Reference method

Machine learning classifiers

Performance evaluation methods Using Different Classifier

Figure 3 shows the architecture of the proposed system which has been developed with the objective to classify people with heart disease level and healthy people. The performances of different machine learning predictive models for heart disease diagnosis on full and selected features were tested. Feature selection algorithms such as

Relief, mRMR, and LASSO were used to select important features, and on these selected features, the performance of the different classifiers level with accuracy was calculated. The level and heart disease dataset have been implemented in several studies [13] and is used in our study. The popular machine learning classifiers logistic regression, K-NN, ANN, SVM, DT, and NB were used in the system. The model's validation and performance

evaluation metrics were computed. The stage of pre-processing of data level is necessary for efficient main representation of data category and machine learning tools which should be tested, classified and trained using evaluation classifier in effective manner. The main task of Pre-processing techniques is to remove of missing values, standard scalar, and Minmax Scalar which have been applied to the large dataset for effective use in the best classifiers. The standard scalar which ensures that every main feature has the mean ZERO and variance ONE, bringing all features to the same coefficient. Similarly, in Minmax Scalar shifts the data such that all features are between ZERO and ONE. The missing values feature row is just deleted from the dataset.

A. Machine Learning Classifiers.

In order to categories the heart attack patients and healthy people, machine learning classification algorithms are used to detect the heart attack level like medium low and high main popular classification algorithms and their theoretical background are discussed briefly in this section.

The aim of this study is to identify the most significant predictors of heart diseases and predicting the overall risks by using logistic regression. Thus, the following binary logistic library are used for the prediction of heart attack diseases

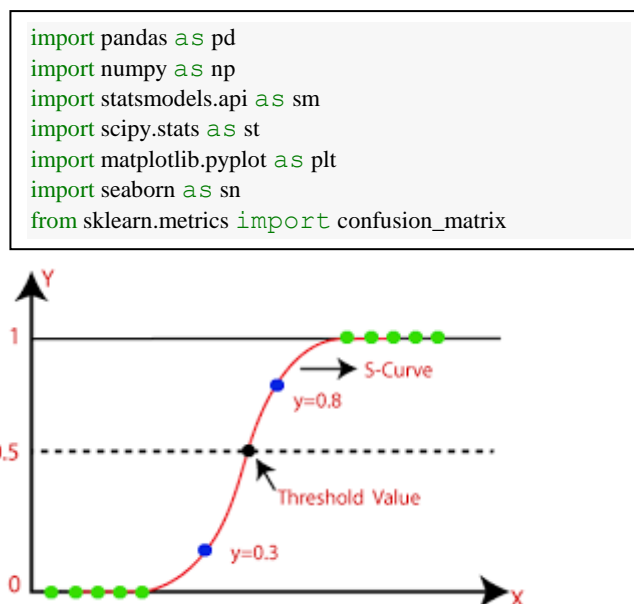


Fig-1: Max and Min Threshold Graph

The maximum and minimum threshold value graph is shown in figure-1. The Logistic Regression a Linear Regression model but the Logistic Regression uses a more complex cost function, this cost function can be defined as the '**Sigmoid function**' or also known as the 'logistic function' instead of a linear function.

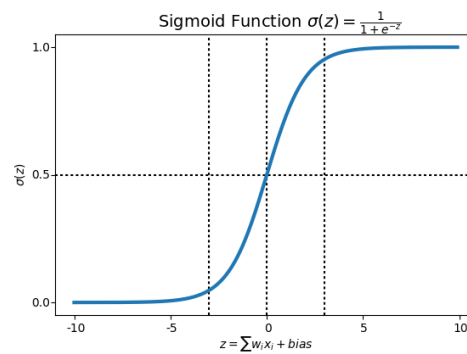
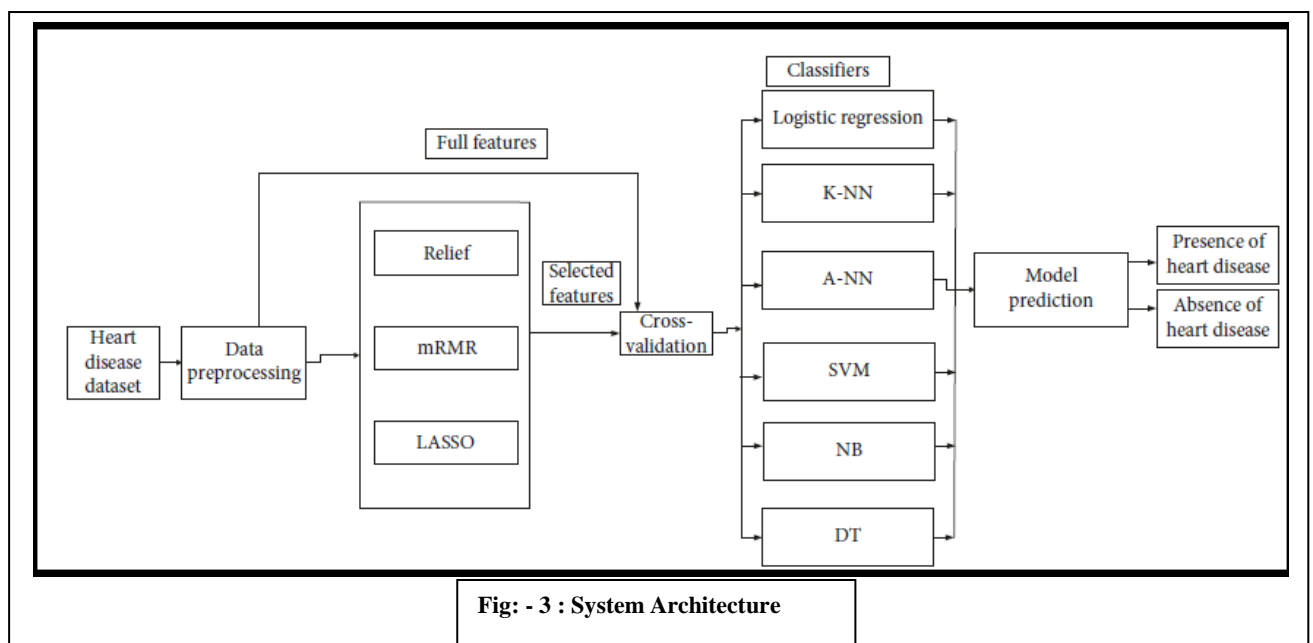


Fig-2 Sigmoid Graph Function

In order to map predicted values to probabilities, we use the Sigmoid function. The function maps any real value into another value between 0 and 1. In machine learning, we use sigmoid to map predictions to probabilities.



S. no.	Feature name	Feature code	Description	Domain of values (min-max)
1	Age	AGE	Age in years	30 < age < 77
2	Sex	SEX	Male = 1 Female = 0	1 0
3	Type of chest pain	CPT	1 = atypical angina 2 = typical angina 3 = asymptomatic 4 = nonanginal pain	1 2 3 4
4	Resting blood pressure	RBP	mm Hg admitted at the hospital	94-200
5	Serum cholesterol	SCH	In mg/dl	120-564
6	Fasting blood sugar >120 mg/dl	FBS	Fasting blood sugar >120 mg/dl (1 = true; 0 = false)	1 0
7	Resting electrocardiographic results	RES	0 = normal 1 = having ST-T 2 = hypertrophy	0 1 2
8	Maximum heart rate achieved	MHR	—	71-202
9	Exercise-induced angina	EIA	1 = yes 0 = no	0 1
10	Old peak = ST depression induced by exercise relative to rest	OPK	—	0-6.2
11	Slope of the peak exercise ST segment	PES	1 = up sloping 2 = flat 3 = down sloping	1 2 3
12	Number of major vessels (0-3) colored by fluoroscopy	VCA	—	0 1 2 3
13	Thallium scan	THA	3 = normal 6 = fixed defect 7 = reversible defect	3 6 7

also be used as the probability of a given data instance belonging to class 0 or class 1. Logistic regression is one best prediction model as compared to another classifier. In Figure-4 shows the different value with their code also we have defined the maximum and minimum range of each value. The position of SVM is shown in figure-3 that SVM used a maximum margin strategy that transformed into solving a complex quadratic programming problem. Due to the high performance of SVM in classification, various applications widely applied it. The NB is a classification supervised learning algorithm. It is based on conditional probability theorem to determine the class of a new feature vector. The NB uses the training dataset to find out the conditional probability value of vectors for a given class. After computing the probability conditional value of each vector, the new vectors class is computed based on its conditionality probability. NB is used for text-concerned problem classification.

ALGORITHM

Stacked Denoising Auto-Encoder Algorithm

Stacked Denoising Auto-Encoder (SDAE), one of the most extensively investigated deep learning architectures, is employed in this study. SDAE is a symmetrical neural network, and mainly used for learning the features from dataset in an unsupervised fashion. Typically, each Denoising Auto Encoder in SDAE will be trained to reconstruct a clean “repaired” input from a corrupted version of it. The SDAE is useful to learn a hierarchy of features in a greedy layer-wise unsupervised model. The learning process starts to train the first auto-encoder by optimizing the loss function with the original input data to learn the first hidden representation layer. After that, the learned hidden layer is used as the input data for training the next auto-encoder to generate higher-level representations, and this process is repeated with K times, where K is the number of hidden layers. Since deep learning architectures, such as SDAE, deal with data abstraction and representation, it is quite likely to be suitable for analysing raw data presented in different formats and/or from different sources.

Supervised fine Tuning

Once the pretraining is complete, we will append a soft max regression layer on the top of the reconstructed feature representation layer to construct a deep neural network, named regularized stacked denoising auto-encoder with soft max regression model (RSDAE-SM), and the use this RSDAE-SM to perform clinical risk prediction task. Specifically, we fine tune the constructed RSDAE-SM using back propagation by minimizing the cross-entropy loss using for the soft max layer.

CONFUSION MATRICS

We have considered the following formula for improved the performance of the complete system. The matrix showed the complete relation between the TP, FP, TN, FN. And their relation. We used confusion matrix, every observation in the testing set is predicted in exactly one box. It is 2×2 matrix because there are 2 repose classes. Moreover, it gives two types of correct prediction of the classifier and two types of classifier of incorrect prediction.

Accuracy: accuracy shows the overall performance of the classification system which shown in figure-5 (1).

Model Error: it is the overall incorrect classification of the classification model which is calculated by using the formula (2) in figure no-5.

Sensitivity: it is the ratio of the recently classified heart patients to the total number of heart patients. The sensitivity of the classifier for detecting positive instances is known as “true positive rate.” Is mentioned in figure 5 reference 3.

$$\begin{aligned} \text{accuracy} &= \frac{TP + TN}{TP + TN + FP + FN} \times 100\%. \quad \dots\dots\dots (1) \\ \text{error} &= \frac{FP + FN}{TP + TN + FP + FN} \times 100\%. \quad \dots\dots\dots (2) \\ \text{Sensitivity (Sn)/recall/true positive rate} &= \frac{TP}{TP + FN} \times 100\%. \quad \dots\dots\dots (3) \\ \text{specificity (Sp)} &= \frac{TN}{TN + FP} \times 100\%. \quad \dots\dots\dots (4) \\ \text{precision} &= \frac{TP}{TP + FP} \times 100\%. \quad \dots\dots\dots (5) \end{aligned}$$

Fig-5: Performance Evaluation term

Specificity: a diagnostic test is negative and the person is Healthy which can be calculate by using the formula -

4. **Precision:** the equation of precision is given as in figure-5

RESULT DISCUSSION

The overall performance of system and prediction of heart attack range using different classifier with their performance is shown in figure-6

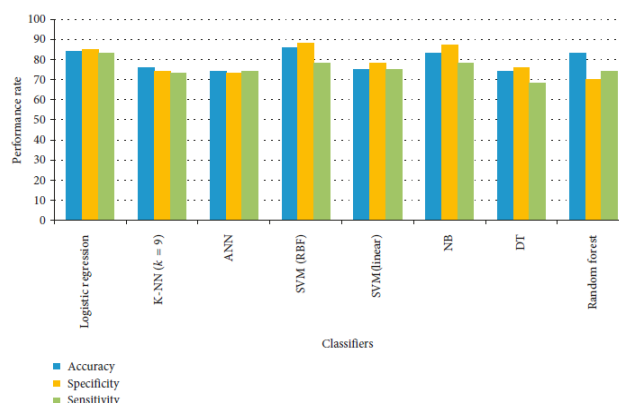


Fig-6: Performance Graph

Logistic regression algorithm gives 89% accuracy with 10 features and 6-fold as compared to other algorithm and prediction performance time is very high as compared to SVM algorithm. Our model predicts the chance of heart attack level that is low medium and high shows the accurate prediction.

CONCLUSION

In this research study, a machine-learning based predictive system was proposed for the diagnosis of heart disease which shows different level called low medium and high-risk prediction. The system was tested on risk heart disease dataset. Different classifiers such as logistic regression, K-NN, ANN, SVM, NB, DT, and random forest were used prediction model that is Logistic Regression used to select the important features. The K-fold cross-validation method was used in the system for validation. In order to check the performance of classifiers, different evaluation metrics were also adopted. The feature selection algorithms select important features that improve the performance of classifiers in terms of classification accuracy, specificity, and sensitivity and reduced the computation time of algorithms. The classifiers logistic regression with 10-fold cross-validation showed best accuracy 89% when selected by FS value. Due to the good performance of logistic regression with 10 cross fold, it is a better predictive system in terms of accuracy.

REFERENCE

1. K. Goulianasl, M, . Adu-opoullost (1997) "Structured Artificial Neural Networks for Fast Batch LMS Algorithms", Neural ,Parallel& Scientific Computations, 54y562.
2. Yoav Freund and Robert E (1997), "A Decision-Theoretic Generalization of On-Line Learning and an Application to Boosting", SchapireAT6T Labs, 180 Park Avenue, Florham Park, New Jersey 07932 Received December 19, 1996 , journal of computer and system sciences 55, 119139 (1997).
3. Friedman J, Hastie T, Tibshirani R. (2000) "Additive logistic regression: a statistical view of boosting", Ann Stat. 1998; 28:2000.
4. Welling, M., Rosen-Zvi, M., & Hinton, G. E. (2005) "Exponential family harmoniums with an application to information retrieval" In L. K. Saul, Y. Weiss, & L. Bottou (Eds.), Advances in neural information processing systems, 17 (pp. 1481–1488). Cambridge, MA: MIT Press.
5. Steven Walczak (2005) "Artificial Neural Network Medical Decision Support Tool: Predicting Transfusion Requirements of ER Patients" IEEE TRANSACTIONS ON INFORMATION TECHNOLOGY IN BIOMEDICINE, VOL. 9, NO. 3, SEPTEMBER 2005.
6. Geoffrey E. Hinton (2006), "A Fast Learning Algorithm for Deep Belief Nets", Singapore 117543, Neural Computation 18, 1527–1554 (2006) C _ 2006 Massachusetts Institute of Technology, Department of Computer Science, University of Toronto, Toronto, Canada M5S 3G4.

7. Marc'Aurelio Ranzato, et al.(2007), "Unsupervised learning of invariant feature hierarchies with applications to object recognition", In: Proc. of Computer vision and Pattern Recognition Conference, 2007.
8. Meystre, S.M. (2008) "Extracting information from textual documents in the electronic health record: A review of recent research". Yearb. Med. Inform. 2008, 35, 128–144.
9. Bengio Y.(2009), "Learning deep architectures for AI", Found Trends Mach Learn 2009;2:1–127.
10. Wu, Stewart, W.F. (2010), "Prediction modelling using EHR data: Challenges, strategies, and a comparison of machine learning approaches", Med. Care, 2010, 48, S106–S113.
11. Bengio Y (2013) "Representation learning: a review and new perspectives". IEEE Trans Pattern Anal Mach Intell 2013;35:1798–828.
12. Wang, H., Feng, K. Liu, L. (2014), "Extracting important information from Chinese operation notes with natural language processing methods". J. Biomed. Inform. 2014, 48, 130–136.
13. Duan H. (2015) "Lexical Characteristics Analysis of Chinese Clinical Documents", In Proceedings of the 2015 7th International Conference on Information Technology in Medicine and Education (ITME), Huangshan, China, 13–15 November 2015; pp. 121–125.
14. Liu C, Wang F, Hu J, et al.(2015), "Risk prediction with electronic health records: a deep learning approach" In: ACM International Conference on Knowledge Discovery and Data Mining, Sydney, NSW, Australia, 2015, 705–14.
15. LeCun Y, Bengio Y, Hinton G. (2015), "Deep learning for EHR" Deep learning Nature 2015;521:436–44.
16. Choi E, Bahadori MT, et al. (2015), "Doctor AI: predicting clinical events via recurrent neural networks", arXiv 2015. <http://arxiv.org/abs/1511.05942v11>.
17. S. Bandyopadhyay, et al. (2015), "Data mining for censored time-to-event data: a Bayesian network model for predicting cardiovascular risk from electronic health record data", Data Mining and Knowledge Discovery, submitted (2014) 2015, 29(4):1033-1069.
18. Z. Huang, et al. (2015) "A probabilistic topic model for clinical risk stratification from electronic health records", Journal of Biomedical Informatics, 58:28-36.
19. Danqing Hu (2016) "Utilizing Chinese Admission Records for MACE Prediction of Acute Coronary Syndrome".
20. D. Hu, et al. (2016), "Utilizing Chinese Admission Records for MACE Prediction of Acute Coronary Syndrome", International Journal of Environmental Research and Public Health, 13(9):912, 2016.
21. Pham T, Tran T, Phung D, et al. (2016) "DeepCare: a deep dynamic memory model for predictive medicine" arXiv 2016. <https://arxiv.org/abs/1602.00357>.
22. J. E and Y. N. (2016) "Electronic Health Record Adoption and Use among Office-based Physicians" in the U.S., by State: 2015 National Electronic Health Records Survey." The Office of the National Coordinator for Health Information Technology, Tech. Rep., 2016.
23. Farhan W, Wang Z, Huang Y, et al. (2016), "A predictive model for medical events based on contextual embedding of temporal sequences". J Med Internet Res 2016;4:e39.
24. Gulshan V, Peng L, Coram M, et al. (2016), "Development and validation of a deep learning algorithm for detection of diabetic retinopathy in retinal fundus photographs", JAMA 2016; 316:2402–10.

25. Cheng J-Z, Ni D, Chou Y-H, et al.(2016), “Computer-aided diagnosis with deep learning architecture: applications to breast lesions in US images and pulmonary nodules in CT scans”, Sci Rep 2016;6:24454.
26. Miotto R, Li L, Kidd BA, et al.(2016), “Deep patient: an unsupervised representation to predict the future of patients from the electronic health records”, Sci Rep 2016;6:26094.
27. Riccardo Miotto and Fei (2017) “Deep learning for healthcare: review, opportunities and Challenges”, Dudley , Briefings in Bioinformatics, 2017, 1–11.
28. Benjamin Shickel & Patrick J. Tighe (2017) “Deep EHR: A Survey of Recent Advances in Deep Learning Techniques for Electronic Health Record (EHR) Analysis” 2168-2194 (c) 2017 IEEE. Personal use is permitted, but republication/redistribution requires IEEE permission. See http://www.ieee.org/publications_standards/publications/rights/index.html for more information.
29. Z. Huang, et al.(2017), “MACE prediction of acute coronary syndrome via boosted resampling classification using electronic medical records”, Journal of Biomedical Informatics, 66:161-170, 2017.
30. P. Y. Wu, et al. (2017) “Omic and Electronic Health Record Big Data Analytics for Precision Medicine” IEEE Transactions on Biomedical Engineering, 64(2):263-273, 2017.



GENDER PROBLEM AND ITS PSYCHOLOGICAL BASIS**Urdabayeva Gulnora Mambetaliyevna**

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ANNOTATION

In recent years, gender and related concepts have become a common focus of social change and social debate. Many societies, including the world community, have observed a rapid change in the concepts of gender roles, gender images in the media, and legal trends regarding gender. This article focuses on the gender problem and its psychological basis.

Keywords: *Gender problem, gender equality, community in the world, psychological basis, research, habit, letter-action, difference.*

Gender equality, inequality, or problem derogation through actions, attitudes, and personal characteristics defined as a particular culture, male or female. The peculiarity of the sex of a man means that they have a psychological sense of being a man or a woman. In contrast, the direction of emotional and erotic attraction of a person in a dependent gender, in relation to representatives of the same gender or both genders. These are important differences, and although we do not discuss each of these terms in detail, one must admit that they do not always correspond to each other. A man can be a biological male, but having a female identity or a different combination of originality and orientation in the case of attraction to women.

Differences between men and women can be based on the following: real gender differences (that is, men and women actually differ in some abilities. There are also gender roles (that is, differences and gender stereotypes between how men and women should act (that is, how men and Women Act, and psychologically differ.

What are the real gender differences?

When it comes to language and language skills, girls develop language skills and boys know more words than boys; but this does not lead to long-term differences. Girls are also more likely to be praised than boys, to agree with the guy they are talking to, and to describe in detail the comments of another man; boys are more likely to express and criticize their opinion than girls on the contrary. Boys demonstrate higher indicators of physical aggression than girls, and are more likely to play organized rough games.

When it comes to aggression, boys show a higher degree of unreasonable physical aggression than girls, but there is no difference in the aggression provoked. Some big differences include children's play styles. Boys often play rough and rough games in large groups, while girls are engaged in low physical activity in much smaller groups. There are also differences in the rates of depression, girls are more likely to be depressed after puberty than boys. After puberty, girls also become dissatisfied with their bodies than boys.

At the same time, there is a significant variability between separate men and separate women. In addition, even if there are differences in the average, the actual size of most of these differences is very small. This means that knowing someone's gender does not help much in predicting its real characteristics. For example, according to the level of activity, boys are considered more active than girls. In addition, many gender differences do not reflect innate differences, but rather reflect specific experiences and differences in

socialization. For example, the estimated gender difference is that boys demonstrate better spatial abilities than girls.

Many of the fundamentals that we differ in terms of gender are actually based on gender stereotypes and not actual differences. Based on the recent analysis, thousands of studies of more than a million people, studies have shown that: girls are not afraid of cowardice, shyness or something new than boys; boys are not more angry than girls, and girls are not more emotional than boys; boys do not work better than girls in mathematics. One of the theories that explains the formation of gender roles in children is the theory of social education. The theory of social education emphasizes that gender roles are studied through empowerment, punishment and modeling. Children are rewarded and encouraged to behave in accordance with their gender roles and are punished for violating their gender roles. In addition, the theory of social education states that children learn about their gender roles by modeling the behavior of adults and older children, thereby developing ideas about the behavior that is appropriate for each gender.

CONCLUSION

The problem of gender is causing the most feedback and controversy today. Studies are being conducted to address Gender issues, and the psychological basis is very important in this regard. The theory of social education is less supportive than the theory of the gender scheme-studies have shown that parents play gender - appropriate games, but in most cases both male and female children are treated the same way that being in a different relationship to boys and girls, men and women is also the result of gender difference, and the cause of gender.

REFERENCES

1. Best, D. L. (2001). Gender concepts: Convergence in cross-cultural research and methodologies: The Journal of Comparative Social Science, 23-25-p
2. Bigler, R. S., & Liben, L. S. (2007). Developmental intergroup theory: Explaining and reducing children's social stereotyping and prejudice. Current Directions in Psychological Science, 162-166.p
3. Chang, A. Sandhofer, C., & Brown, C. S. (2011). Gender biases in early number exposure to preschool-aged children. Journal of Language and Social Psychology.
4. Hyde, J. S. (2005). The gender similarities hypothesis. American Psychologist, 112-114-p

LEGAL PROVISION OF DIGITIZATION IN THE FIELD OF CUSTOMS**Usmanaliev Farruh**

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ANNOTATION

In our country, measures are being taken on the active development of the digital economy, the broad introduction of modern information and communication technologies in all sectors and spheres, primarily public administration, education, health and agriculture. In particular, the implementation of more than 220 priority projects aimed at improving the system of e-government, further development of the local market of software products and information technologies, Organization of IT parks in all regions of the Republic, as well as providing qualified personnel of the sphere has begun. In this article, opinions and comments on the legal provision of digitization in the field of Customs are made.

Keywords: *Customs, digitization, Legal Issues, News in the field, IT, Information Technology.*

INTRODUCTION

Customs — 1) the place where the boj is levied; 2) the state institution that controls the total cargo passing through the border, including luggage and postal items; is engaged in the inspection, regulation and clearance of the transferred cargo, from which the boj and levies are levied. To prevent violations of the procedures established by the legislation on customs, to take measures against them, to conduct inquiries and urgent search, to fight against smuggling also fall within the competence of the customs office. Customs are usually located at sea and river ports, international airports, railway lines, border punkts. Customs institutions control the provision of the country's interest in foreign trade, prevent the withdrawal of valuable assets (works of art, rare metals, etc.) from the territory of the country.

President of the Republic of Uzbekistan At the meeting between Mirziyoyev and the Secretary General of the World Customs Organization, issues of digitization in the field of combating corruption, smuggling and violation of customs legislation were discussed. The importance of implementing joint projects on the introduction of international standards, modernization of customs posts and improvement of the normative-legal framework was emphasized. Uzbekistan has been a member of the World Customs Organization since 1992. In the following years, cooperation with this organization was significantly active. With the support of the organization, in January 2020, the "Single Window" automated system, the situational Center for customs control coordination was launched. Recently, the Customs Laboratory of Uzbekistan received the status of the Regional Laboratory of the World Customs Organization. The Customs Institute of the state customs of Uzbekistan is accredited in the research program of this international structure.

Assistance in improving the skills of customs officers. Over the next few years, more than 200 customs officers of our country took part in short-term training courses of the organization. At the meeting with the Secretary General of the World Customs Organization Kunio Mikuriya, special attention was paid to the issues of cooperation on improving the activities of the state customs office of Uzbekistan and increasing its efficiency, and new agreements were noted. Shavkat Mirziyoyev noted that it is important to carry out joint activities and projects in the field of digitization, introduction of Advanced International Standards, modernization of customs posts using conventional systems, fight against corruption, smuggling and violations in the field of Customs, Training specialists and other areas. It was agreed to adopt a new "road map" to expand the practical partnership between Uzbekistan and the World Customs Organization. As a result of these projects,

the improvement of the customs system in our country will contribute to the acceleration of the digitization process.

Consistent measures are being taken in our country to modernize and develop the e-government, including the system of public services, aimed at simplifying the passage of administrative procedures, improving the quality of population growth, improving the investment and business environment. At the same time, a number of unresolved problems and shortcomings are preserved, which are hindering the provision of digitization and the transition to the digital economy. In particular, the single principles of the development of Public Information Systems have not been developed, and the activities in this area are carried out without interrelation with other information systems. The infrastructure of the "electronic government" system is not developing at the proper level, which has its impact on the wide application of modern information and communication technologies in the provision of public services and inter-agency electronic cooperation.

Consistent reforms are being carried out in our country aimed at increasing the efficiency of the activities of the bodies of the state customs service of the Republic of Uzbekistan (in subsequent places-customs bodies) using modern information and communication technologies. The work carried out on the implementation of the World Trade Organization, the World Customs Organization and other international organizations' standards and recommendations on the implementation of national legislation requires improvement of Customs Administration and simplification of customs procedures. At the same time, "paperless and electronic customs" does not develop to the extent necessary, methods of combating smuggling, smuggling of counterfeit products, corruption, illegal currency transactions and evasion from payment of customs duties require the use of modern and tested methods of Customs Administration.

Reform of Customs Administration, further improvement and increase of efficiency of customs bodies, formation of "digital customs", which is a logical continuation and development of "paperless and electronic customs", as well as, in order to accelerate the implementation of the universally recognized international norms and standards in the field of customs affairs into the national legislation, the following directions of development and improvement of the activities of customs bodies have been developed in 2020-2023, which includes the reform of Customs Administration and the improvement of the effectiveness of the activities of the state customs According to it:

- further improvement of the regulatory and legal framework in the field of Customs;
- development of the institutional framework for the activities and infrastructure of customs bodies with optimal use of available forces and Means;
- ensuring transparency and efficiency of customs bodies through the introduction of modern and advanced information and communication technologies in the field of customs within the digital economy;
- improvement of the implementation of fiscal functions of customs bodies, simplification of tariff and notarized regulation of foreign economic activity (in subsequent places;
- fight against violations of the legislation on smuggling and Customs;
- training, retraining and further improvement of skills and qualifications of the employees of customs bodies, ensuring their social protection;

- further development of mutually beneficial cooperation with international organizations and customs services of foreign countries was determined.

The system of risk management of the state customs office of the Republic of Uzbekistan was introduced at the border post offices of the automobile, and in the temporary importation of vehicles, it was planned to provide the carrier with the opportunity to apply the temporary withdrawal period before the expiration of the period of electronic re-withdrawal in real time and to carry out an in-depth analysis of the structure and dynamics of imports and exports of goods, as well as an analysis of the causes of both physical and value increase in the volume of imports, and to establish cooperation with interested agencies on the issues of deepening the localization of production and expansion of industrial cooperation was entrusted to Customs

Customs authorities were granted the following rights:

- to carry out customs audit on goods and vehicles when they arrive at the places where they are stored and sold;
- carry out inspections on the accounting of goods and vehicles, including accounting and reporting documents, as well as on the Proceedings of preliminary documents, which are imported and (or) exported.

Decree of the president of the Republic of Uzbekistan “on the reform of Customs Administration and improvement of activities of the state customs service bodies of the Republic of Uzbekistan” dated June 5, 2020, literally serves as the main guideline for the radical reform of the activities of customs bodies and effective use of modern information and communication technologies in Customs Service.

Currently, extensive work is being carried out to simplify the principles of customs procedures again, reduce the human factor through the widespread use of digital technologies in the customs system, make extensive use of the opportunities of modern information and communication technologies based on the principles of risk management of forms of customs control, simply switch to “digital customs”.

In the case of the Russian Federation, information on customer transactions, accounts and deposits; the sum of the obligations of the insurer to its clients or beneficiaries under the contract of voluntary life insurance; information on the value of property recorded by the financial market entity carrying out depository activities of individuals, as well as payments and transactions related to accounts and deposits; voluntary life insurance contract; asset management agreement (including approved with the issuance of investment units); contract for brokerage services; depository agreement; pension agreement; agreement with the central counterparty; or other agreements referred to in this sub-paragraph, in accordance with which the financial market entity is in the interests of the client for the storage, management, investment and / or other operations of cash or other financial assets from its clients or directly or indirectly. The electronic implementation of this process has reportedly created a number of benefits for Russian citizens. The electronic system also works much better in the operation of the Digital Customs System. World experience shows that the digital world is a requirement of the 21st century, and in this age of information and technology, the situation itself requires the digitization of every field.

Today, customs bodies have implemented more 60 information systems and more 30 interactive services. In particular, as a result of the introduction of the system of “Risk Management” in customs bodies, today the products directed to the export and import of law-abiding entrepreneurs are quickly transferred to customs formalities. By improving this system, the car was introduced into practice at border customs posts as a test from June 1, 2020. This, in turn, will contribute to a significant reduction in queues at border duty posts in the future.

As a result of the categorization of participants in foreign economic activity according to the level of risk, the number of Customs examinations decreased by 1.4 times and its effectiveness increased by 1.5 times. The customs clearance time was reduced by 1.7 times in exports, 1.4 times in imports. Currently, 62 percent of the goods are undergoing customs clearance in a simplified procedure. Realizing that the role of Information Systems in simplifying customs procedures is great, the processes associated with formalization are fully automated.

In addition, the Department for combating smuggling and violation of customs legislation should be reorganized as the main department for combating smuggling and customs audit, and the following additional tasks should be assigned to it, namely, the verification of the placement in customs regimes, the comparison and verification of the data recorded in the documents confirming the information specified in the, examination and examination of documents related to financial and economic activities in order to identify cases of violation of the legislation on customs and the requirements for currency regulation, to verify that the privileges on payment of customs duties are correctly applied and that the value of the customs is correctly determined, to check compliance with the restrictions on the disposal of, in addition, the task is to electron the control system of other cases and transfer it to the digitized system in the manner prescribed by law. The Department of customs expertise and maintaining the commodity nomenclature of foreign economic activity was reorganized as the Department of control and customs expertise of notarization in foreign economic activity.

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REFERENCES

- [1] PD-6005-son 05.06.2020. “On reforming customs administration and improving the activities of the state customs service bodies of the Republic of Uzbekistan”.
- [2] PD-4699-son 28.04.2020. About measures for the widespread introduction of the digital economy and e-government. <https://lex.uz/docs/-4800657>.
- [3] Sustainability | Free Full-Text | Digitization of the Customs Revenue Administration as a Factor of the Enhancement of the Budget Efficiency of the Russian Federation | HTML. <https://www.mdpi.com/2071-1050/13/19/10757/htm>
- [4] State Customs Anti-Corruption Commission. <https://www.customs.uz/oz/lists/view/242>
- [5] Uzbekistan hopes to cooperate with the World Customs Organization on digitization – Gazeta.uz <https://www.gazeta.uz/oz/2021/11/26/wco/>
- [6] Situation Center launched in the state customs office | team of the United Nations Organization in Uzbekistan. <https://uzbekistan.un.org/uz/114731-davlat-bojxona-qomitasida-situasion-markaz-ishga-tushirildi>
- [7] On the reform of the customs administration and improvement of the activities of the bodies of the state customs service of the Republic of Uzbekistan. <https://yuz.uz/uz/news/o-reformirovanii->

tamojennogo-administirovaniya-i-sovershenstvovanii-deyatelnosti-organov-gosudarstvennoy-
tamojennoy-služb-respubliki-uzbekistan



THE ROLE OF THE SPIRITUAL HERITAGE OF HAKIM TERMIZI AND ITS IMPORTANCE FOR HUMAN PERFECTION

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ABSTRACT

This article analyzes the spiritual heritage of our compatriot, the great mystic Hakim Termezi, and its role in human development.

Keywords: *Hakim Termizi, "Bayanul kasb", "Adabun nafs", "Riyazatun nafs", "Buduvvu shan", "Manozil ul ibad min al ibada", sufism, occupation, sustenance, labor, honesty and purity.*

INTRODUCTION

Hakim Termizi (820-932), is an acknowledged world thinker who was known by such names. as "Hakim ul-awliya" (Hakim valiev), "al-Hakim", "Tabib", "ash-Shaikh", "al-Alim", "al-Allama", "Muhaddis", "al-Zahid", "Al-Hafiz", "al-Imam", "al-Arif", "Al-valiy", "Al-Muazzin"

Hakim Termizi left a great spiritual legacy. The works of Hakim Termizi "Buduvvu sha'n", "Adabun nafs" (Nafs approve), "Riyazatun nafs", "Navadirul usul", "Description of the profession-life" (Bayanul Kasb), "Masail al-Maknuna", "Gavrul umur" are analyzed, "Marifatul asrar", "Masail ahli sarakhs", "Al imsal minal kitab sunna", "Bayanul fark", "Manazil ul-ibad min al-ibad" (Addresses of ministers in the service), the methodological significance of these works in the coverage of the Sufi -philosophical ideas of the thinker.

DISCUSSION

The work "Buduvvu sha'n" is an autobiographical work written by Hakim Termizi about his life, it highlights his emotional experiences and some facts that happened in his life. Also, this work, despite the fact that it is similar to the autobiography of Hakim Termizi, focuses on symbolic situations.

In "Buduvvu sha'neh" situations of personality and events connected with the struggle against nafs dominate. Due to the fact that in historical works and bibliographic encyclopedias there is very little information about the life and scientific and creative activity of a scientist, in our study the information left by him about his life activity is of extreme importance.

The work of Hakim Termizi "Adabun nafs" (Etiquette of nafs) is a work that includes the theoretical foundations of the education of nafs, about the etiquette of nafs, i.e. it is a position, a theory in a certain sense. In the work, reflections primarily on the dispute of life, the factor of man, nafs, heart, mind and air, later on the problem of nafs in the inner world of man, the struggle against him, the external and internal features of nafs. Analysis of the work shows that a person is at the center of his research.

The work "Riyazatun nafs" is a continuation or continuous part of the treatise "Adabun nafs" by Hakim Termizi. Work is important among works of spiritual educational value. In the work, Hakim Termizi explains that everything returns to the inner world of a person - heart, soul, nafs, mind and psyche, i.e. origins. In this work, the topic of curbing nafs is the main issue, instructions are given that are necessary to curb nafs a person.

The educator of nafs and the heart, Valiullah Hakim Termizi, in his work "Marifat-ul asrar", revealed the secrets of phrases and words within the framework of Sufism, discusses their meaning, what they tend to, on the basis of deep scientific understanding.

The work "Manozil ul-ibod min al-ibad" (Addresses of ministers in ministry) is dedicated to tasawwuf. The treatise, describing the addresses of the spiritual perfection of people, describes the requirement and meaning of seven addresses from the address of "repentance" to the address "kurbat" (closeness to the Truth) of human perfection. World addresses can be crossed by any person, but the intersection of ministry addresses can be done by special people. He believes that the intersection of spiritual addresses is associated with virtues such as science, morality, ichlas, faith, love, devotion, morality and murshids (piri kamil) showing the righteous path.

In the treatise "Bayanul-Kasb" the ideas of Hakim Termizi about daily bread and profession are substantiated. He puts forward the creative idea that a real person should earn a living through work and an honest profession. The ideas of Hakim Termizi about an honest profession and honest daily bread subsequently positively influenced the teachings of Khojagon and Naqshbandiy.

CONCLUSION

Therefore, within the framework of our research, the following issues are widely covered: the meaning of spiritual addresses in the perfection of a person, the problem of a person's awareness of himself, heart, soul, purity of heart, nafs, nafs upbringing, honest labor, honest daily bread.

REFERENCES

1. Абу Абдуллох Мухаммад ибн Алий ибн Ҳасан Ҳаким Термизий. Касбнинг Баёни. Таржимон. Шайх Мухаммад Содик Мухаммад Юсуф. Hilol nashr/T:2019.Б.116
2. Мухаммад Ҳаким Термизий рисоалари. Касб-тирикчилик баёни (Баёнул касб) Таржимон: Жўрабек Чўтматов. Тошкент. Movarounnahr.2018. Б.367.
3. Абу Абдуллох Мухаммад ибн Али Ҳаким Термизий. Маърифатул асрор. (Сирлар маърифати). Таржимон: Абдулхамид Мухаммад Турсунов. Т.: "Мовароуннахр" 2017.
4. Хаитов.Л. Ҳаким Термизий - Нафс илмининг назариётчиси. "Ислом тафаккури" илмий-маърифий, диний-маданий, ахборот нашри. (4-son) 2020.
5. Azamatovich, H. L. (2019). Hakim At Termiziy scientific heritage in the Hadis theme. International Journal on Integrated Education, 2(5), 10-13.
6. Azamatovich, X. L. (2021). The Concept of Heart In The Treatises Of Hakim Termizi. CENTRAL ASIAN JOURNAL OF LITERATURE, PHILOSOPHY AND CULTURE, 2(3), 63-67.

CAUSES, CONSEQUENCES AND PREVENTION OF THE OCCURRENCE OF VIOLENCE IN THE FAMILY

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ANNOTATION

In the practice of psychological work with adults and children, I periodically experience bad violations caused by family violence. In some cases of physical, psychological violence in the family happens over the years. In this article, I want to analyze the phenomenon of family violence, consider the possible causes of its occurrence and, most importantly, the consequences of family violence for children brought up in these families. That is, thoughts and opinions are made about the Causes, Consequences and Prevention of the occurrence of violence in the family.

Keywords: *family, neighborhood, society, violence in the family, causes of occurrence, consequences, prevention.*

Violence, defined by the World Health Organization, is the deliberate use of physical or force aimed at one or another person (group of persons), resulting in (or likely to do so): bodily injury, death, psychological trauma, developmental defects, or any kind of damage. The consequences of violence are terrible. Post-violence violations affect work at all levels. They lead to constant personal changes that prevent the realization of the individual in the future. In addition to physical injuries, which are a direct result of being in a violent relationship with a person, there are psychological consequences: bodily disorders, personal and emotional disorders, social and mental disorders. Violence in childhood contributes to the formation of specific family relationships, special life scenarios.

In children whose parents use violent "methods of upbringing", physical and neuropsychic development can be delayed, self-esteem decreases, self-denial, there is a feeling of guilt and shame for their own existence. Later, such children are tormented by the fact that they have enough relationships with other people, they may experience depression or, on the contrary, an increase in the level of aggressiveness, inability to restrain themselves, demonstrate destructive behavior. Thus, the consequences of violence affect all spheres of human life! Any form of violence has a detrimental effect on the development of a person and its formation in society.

What are the reasons why one person uses violence against another? They are different. This is also a way of not being able to restrain one's own feelings (when experiencing anger, a person cannot restrain it and show physical or other aggression), as well as a "normal" way of expressing anger once, usually formed in childhood, a natural way of expressing a feeling of anger for a person (that is, it is perceived as violence against another person). In other words, violence is often used by people who cannot cope with the feelings of anger that arise in them, or who are completely unaware of other constructive ways of expressing it! Most often, violence against other people is used by those who once faced violence on their own.

And, of course, children suffer the most from this condition! Even if the financial does not face violence, but only becomes a witness of violence by adults who educate him, form an unhealthy opinion that such behavior is normal. Especially if then adults distribute self-justification and regret with their own "regret

what happened"... Such children themselves are often more violent than others, but most importantly, they are mature and begin to withstand violence against them. Having witnessed several violent relationships in their families, they really began to see this as normal! Also: the truth of violence with subsequent repentance can be perceived by them as proof of love. Children with injuries from this experience, becoming mature, repeat the fate of their sin-mothers. They really believe that this is normal, because they did not see anything else.

Of course, there are many secondary factors that affect the emergence and development of violent relations in the family. Parents who have seen their child grow up as aggressive do not always cope with this problem on their own and, unfortunately, rarely seek help from specialists. Such a credit grows as aggressive and, with great probability, within the framework of family relationships, they demonstrate their aggressiveness. Wives of aggressive husbands in their address do not want to talk about violence in order not to destroy the image of a "good family", do not ask for help from the police, because they are afraid of publicity. This can be attributed to the fact that their parents refuse to divorce. They are afraid to be alone with the problem and go out against not only the aggressive husband, but also the figures of the parents. Children are afraid to talk about violence from their parents, so as not to receive even more punishment. And if they decide to talk about it, then I can face my rejection: to hear that they themselves are to blame, that they have to endure. And sometimes people do not understand at all that it is impossible to accept such treatment - they actually see what violence is normal. Either he gets a slap in the head, or he pours threats and insults at him. No one considers such behavior to be normal and acceptable for other adults, but many people have such an attitude to their children-that is, the younger, the stronger, and who they should protect. But you can at least leave the boss. But children, from sin-mothers, have no chance to stop such violence and fall under his pledge.

CONCLUSION

These children grow not only with a large number of social and psychological problems and an unstable psyche, but also with a model of broken relationships in their heads. Then they are those who use violence against their loved ones, and those who, like adults, will endure such treatment for years. That is, they distribute aggressive behavior towards those who are younger and weaker, because the phrases that parents need to protect their youth do not work, because they themselves broadcast on the contrary! In order for the problem of violence in the family to be solved, it is necessary, first of all, to spread as widely as possible in society: about violence and its consequences! The fact that there are constructive ways to solve problems, that no one has the right to raise a hand against another, that one person has no right to threaten and put pressure on another. The main purpose of this article is to draw the attention of the readers to the problem of existing family violence. To highlight the devastating effects of violence, characterize violence transmission as a method of solving problems from generation to generation. With this article we want to emphasize once again that family violence is a very big problem in modern society. In this situation, changing something belongs only to our strength. Just stop treating the violence as usual.

REFERENCES

1. [Oiladagi zo'ravonlik sabab va oqibatlar 20-12-2021, 12:26 - Zamin.uz](#)
2. [«Oiladagi zo'ravonliklarni oldini olish, oiladagi zo'ravonliklardan jabr ko'rganlarga himoya orderining ahamiyati» onlayn ochiq muloqoti o'tkazildi \(iiv.uz\)](#)
3. [O'zbekistonda ayollarga tazyiq avj olganmi? Raqamlar "so'zlaganda" | Qalampir.uz](#)

SOCIOLINGUISTICS AND DIALECTOLOGY

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ABSTRACT

This ability to adjust one's speech to fit the situation in which it is said is called *sociolinguistic competence*, and without this ability, even the most perfectly grammatical utterances can convey a meaning entirely different from that which the speaker intended.

Key Words: *dialectology, non-linguistic, sociolects, sociolinguistic competence, perfectly, grammatical.*

Sociolinguistics also deals with the problem of the typology of languages. The sociolinguistic typology of languages is a typology that takes into account its social status in society. Such a typology is based on four criteria:

1. Standardization - this is a literary language adopted by speakers of a particular language. The key to standardization is to create the grammar and vocabulary of the language.
2. Life - it takes into account the existence of a society that speaks a particular language.
3. Historically, the use of a particular language by society implies that it develops in a moderate, even manner.
4. Autonomy - this means that a language that serves as a mother tongue for a particular social group is radically different from other languages in terms of structure or is a variant of one language. For example, Uzbek, Kyrgyz, Kazakh, When Karakalpak languages are compared, phonetic, lexical, and grammatical differences between them are also noticeable, which leads to the conclusion that these languages are autonomous, independent languages.

Based on the above typological features, the sociolinguistic classification of languages is carried out. Modern linguists divide languages from the sociolinguistic point of view into the following 7 types: Standard languages, Creole languages, Indigenous languages, Classical languages, Pijin languages, artificial languages and dialects. Now, let's talk about dialects. The word dialect is derived from the Greek language and means dialect. It is a form of common language used by people who have a common territorial and social identity, and in this sense we can say that dialects are the basis of sociolinguistics.

Several linguists have conducted research on this subject. In particular, since the 1920s, the interest of European and Russian linguists in this problem has become serious. In particular, a number of studies began to emerge on the sociolinguistic classification of social speech, the different parameters of urban and rural speech, and the specific features of the speech of artisans, workers, and criminal groups. The great sociolinguists have done serious research on the problems of the balance between society and language, the relationship between the speaker and the language. also began to recognize that they had a difference.

For example, the well-known linguist VM Zhirmunsky notes that in addition to the division of the existing language in society into regional dialects, it is also divided into social dialects: it is necessary ". Some scholars call the speech of local peasants a "conditional language." It ranges from the existing form of language (including the biblical form of literary language) to the conspiratorial slang (conditional language) with a certain social character of the language and the language of young children with mechanical coding. In general, all forms of language that are limited to the social basis can be included in the social dialect.

If territorial dialects arise from the geographical separation of the peoples speaking the same species, social dialects arise from the geographical separation of the speakers of the same language in terms of social class and field, specialty, age, sex. As Baudouin de Courtenay points out, the geographical and social differences of a speaker create a horizontal and vertical division of language. In other words, territorial diversity represents the horizontal division of language, while social diversity represents the vertical division of language. Therefore, in defining the social dialect, it is necessary to take into account the fact that the speaking society belongs to a particular social or professional group, unites as members of a corporation, social class, age, gender, aesthetic, cultural appearance.

Some scholars regard the social dialect as a variant of the language used by members of a particular community or social group. Sociolinguist VD Bondaletov clarifies this problem with solid evidence. He divides all forms of language belonging to the category of social dialects into the following groups, emphasizing that they have a clear social basis and are carried out by separate social classes, professions and age-group communities as a means of communication.

1. The "private" language of the profession. (More precisely, the lexical system of the profession, for example, hunters, potters, carpenters, craftsmen, shepherds, traders, as well as other trades and occupations).

2. The language of groups or corporate groups (for example, in age groups such as students, athletes, soldiers)

REFERENCES

1. Archer, C.M. (1986). Culture bump and beyond. In J.M. Valdes, Culture bound: bridging the cultural gap in language teaching (pp. 170-178). Cambridge: Cambridge University Press.
2. Blum-Kulka, S. (1983). Interpreting and performing speech acts in a second language- a cross cultural study of Hebrew and English. In N. Wolfson & E. Judd (Eds.), Sociolinguistics and language acquisition (pp. 36-55). Rowley: Newbury House.
3. Blum-Kulka, S., House, J., & Kasper, G., (Eds.). (1989). Cross-cultural pragmatics: requests and apologies. Norwood: Ablex.
4. Clancy, P. (1990). Acquiring communicative style in Japanese. In Scarcella, R., Anderson, E., and Krashen, S. (Eds.), Developing communicative competence in a second language (pp. 27-40). New York: Newbury House.
5. Cohen, A.D., & Olshtain, E. (1983). Apology: a speech act set. In N. Wolfson & E. Judd (Eds.). Sociolinguistics and language acquisition (pp. 18-35). Rowley: Newbury House Publishers.
6. Cohen, A.D. & Olshtain, E. (1991) Teaching speech act behavior to nonnative speakers. In M.Celce-Murcia (Ed.), Teaching English as a second or foreign language (2nd ed.) (pp. 154-165). Boston: Heinle & Heinle.
7. Hinkel, E. (1994). Appropriateness of advice as L2 solidarity strategy. RELC Journal. 25 (2), pp. 71-93.

CULTURE UNDERSTANDING IN FOREIGN LANGUAGE TEACHING**Xudaynazarova Muborak Baxtiyorovna**

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ANNOTATION

In the course of foreign language teaching, the priority should always be given to increase international understanding by enabling the students to enter into the life, thought, and literature of people who speak another language. The objective may vary from one period to another, but it should long be present in the thinking of our minds. The following words attempt to explore the importance of culture teaching and relevant activities so as to raise our awareness of the significance of culture understanding in our teaching.

Keywords: *Culture understanding, Culture teaching, Devices, Activity*

Cultural understanding has been a program, a vision, a chance of defining a new role for language teachers and the time has arrived when the social significance of this international cultural understanding is becoming more apparent. This inevitably raises the question as to what it is most important to mediate within the cultural dimension - in its new, broad interpretation. We all know that understanding a language involves not only knowledge of grammar, phonology and lexis but also a certain features and characteristics of the culture. In 1904, in his book *How to Teach Foreign Language*, Jespersen stated that “the highest purpose in the teaching of languages may perhaps be said to be the access to the best thoughts and institutions of a foreign nation, its literature, culture—in short, the spirit of the nation in the widest sense of the word.” It maybe well to ask ourselves whether such idealistic aims have been realized in practice, whether international understanding can be said to have been prompted by the considerable amount of language teaching in schools around the world. Realizing it or not, language teachers cannot avoid conveying impressions of another culture.

Culture is all pervasive and complex, which is reflected in every aspect of life. And obviously, language is the key to the cultural heritage of another people or that knowledge of another language enables individuals to increase their personal culture through contact with great minds and literatures. The culture of a people, in its broad sense, refers to all aspects of shared life in community. We growing up in a social group learn ways of looking at things, doing things, expressing things and solving certain problems in certain ways. We also learn to value something and despise or avoid other things. These attitudes, reactions and emotions become part of our ways of life without being conscious of them. Yet these culturally determined features actually have rooted in a deeper and more significant social conventions, relations and assumptions which are composed of the main stream of a culture of a people. A language is learned and used within such a context, drawing from the culture distinctive meanings and functions which must be assimilated by language learners if they are to control the languages as native speakers control it. In a country where there is one predominant culture, students will, as they grow up, react in a certain ways and value certain things. So their first encounter with a different set of behavior patterns may turn out to be a shock, causing them to consider the speakers of the language as offensive or rude. For instance, the friendly Chinese greeting “Where are you going?” may receive surprising refusal from people of foreign cultures. In a society where individuals must never admit what they are wearing is valuable or in good taste, the reply of “thank you” to a compliment may be considered an indication of a certain conceit, whereas it is the normal response to American. In every language, these situations may emerge to puzzle and perturb the monolingual students.

Culture teaching is a long and complex process concerning something more than language use itself. In doing the above activities, the aim is to increase students' awareness and to develop their curiosity towards the target culture and their own, helping them to make comparisons among cultures. The comparisons are not meant to underestimate any of the cultures being analyzed, but to enrich students' experience and to make them aware that although some culture elements are being globalized, there is still diversity among cultures. This diversity should then be understood, and never underestimated. Then where should we go and what to achieve in this field is the next important lesson to deal with. Several goals are thus proposed by Seelye in which student are supposed to demonstrate that they have acquired certain understandings, abilities, and attitudes: That they understand that people act the way they do because they are using the options the society allows for satisfying basic physical and psychological needs; That they understand that such social variables as age, sex, social class, and the place of residence affect the way people speak and behave; That they can demonstrate how people conventionally act in the most common mundane and crisis situations in the target language; That they are able to evaluate the relative strength of a generality concerning the target culture in terms of the amount of evidence substantiating the statement; That they have developed the skills needed to locate and organize material about the target culture from the library, mass media, and personal observation; That they possess the curiosity about the target culture and empathy toward its people. It goes without saying that foreign language teachers should be foreign culture teachers, having the ability to experience and analyze both the home and target cultures. And teachers of the culture of a linguistic community need informed insight into the culture to be taught and informed insight into the culture of the language learners. Whether native speaker or foreign-language teacher, those wishing to present another culture in a way which may foster intercultural understanding and appreciation will need to acquire special knowledge of how cultures are organized—their value system, their institutions, their interpersonal relationships. Where possible, teachers should live for some time in both the cultures to be taught. If this is not possible, we must compensate for the lack by disciplined reading. We must read what the people living in the culture read (books, newspapers, magazines), listen to the radio and watch the television broadcasts where accessible, and watch films made of local consumption. Whenever possible, we should contact with native speakers, discussing all kinds of subjects with them and in this way we could educate ourselves in cultural interpretation. Finally, by teaching about other cultures, foreign language educators do not necessarily nip prejudice in the bud, so to speak; cultural bias can still plague the very aspects of the target culture which teachers 'choose to indict or advocate', as Cormeraie (1997) insightfully remarks. The teachers of another culture must develop sensitivity toward the attitudes of the students toward their own and other culture, moving delicately toward attitude change. Above all, native teachers and foreign-language teachers alike must overcome the temptation to demonstrate the superiority of one culture over another. Hopefully, the above lines have contrived to clarify most of the issues it set out to investigate, and have helped contribute to a better understanding of culture and its importance in the foreign language classroom.

REFERENCES

1. Byram, M., Morgan, C. and Colleagues. (1994). Teaching and Learning Language and Culture. Great Britain: WBC. Cormeraie, S. (1997).
2. Rivers, Wilga M. (1981). Teaching Foreign-language Skills (2nd edition). (1974).
3. J. B. Carroll. (1963). "Linguistic Relativity, Contrastive Linguistics, and Language Learning." IRAL 1, no.1:12.

EDUCATIONAL CONCEPTIONS AND THEIR IMPORTANCE IN THE EDUCATIONAL SYSTEM

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ANNOTATION

It was adopted by the decision of the Cabinet of Ministers with the aim of deeper integration of universal values and high spirituality into the minds of students of General secondary educational institutions taking into account the age and psychophysiological features, upbringing them in the spirit of patriotism and humanism, Organization of spiritual and educational work in general secondary educational institutions on a The introduction of such a science in educational institutions through the draft resolution "on the approval of the" continuous Spiritual Education Consortium " will certainly contribute to the education and training of students. In this article, opinions and comments will be made about the educational concept and their importance in the educational system.

Keywords: *educational counseling, educational institutions, training and education, new project, spirituality.*

Today's global processes, the development of Science and technology, the need for an innovative society create many opportunities for young people. They put forward vital requirements such as making quick decisions, forming innovative thinking, and being faithful to national and universal values along with increasing potential.

Therefore, the concept of "Education" in the Republic of Uzbekistan is aimed at solving the actual problems existing in the implementation of the state policy in the field of Education. The concession sets out the priority tasks, the main goals and directions aimed at bringing the work in the education of the younger generation to a new level.

In addition, the directions established in the consortium further serve the legal framework, economic opportunities and organizational goals in order to educate the country's youth spiritually and competently, to realize its achievements and potential, to attract them widely to the development of the state and society, and to support its initiatives at a sufficient level.

The period of pregnancy in the Republic of Uzbekistan, based on the principles of continuity and harmony in the educational process, has defined the main directions of spiritual upbringing of infants, children and schoolchildren and is important in the development of scientifically based indicators of the evaluation of spiritual education. In youth, important qualities such as loyalty to the motherland, entrepreneurship, willpower, ideological immunity, compassion, responsibility, tolerance, legal culture, innovative thinking, labor are gradually formed from infancy. It determines the forms of effective use of the advanced achievements of national and modern pedagogy in the education of students. It is regularly acquainted with effective pedagogical technologies, methods and forms of implementation tested in the world experience of continuous spiritual education, increasing the knowledge of the population on the upbringing of children, their pedagogical culture.

It is necessary to form a healthy worldview against intrusive ideas that spread through the mass media, including the global internet, obscene ills, leading young people astray. In the organization of continuous spiritual education, the cooperation of state organizations, civil society institutions, mass media and the private sector is effectively established. One of the priorities of the implementation of the concept of continuous

spiritual education is to increase the knowledge of the population on the upbringing of children, their pedagogical culture, to regularly familiarize citizens with effective methods and forms of implementation of continuous spiritual education. Education the purpose of the concept is to bring an adult of a high — quality, harmonious generation on the basis of the gradual formation of the necessary social skills and qualities for an independent life in the younger generation corresponding to the age.

In the general secondary education system, the concept of national independence, which is taught in general secondary schools with the aim of ensuring the age-appropriate spiritual development of students and the formation of active civil competences, defines the main directions of a single educational science that combines the disciplines “the idea of national independence: basic concepts and principles”, “the sense of decency”, “the idea To this end, the experiences of countries such as the people's Republic of China, Singapore, Japan, the Republic of Korea, Australia, Germany, Great Britain, France and the Russian Federation were studied, the curricula of the current disciplines were comprehensively analyzed comparatively.

The program, which was created on the basis of the concept, combines several optional training courses programs, such as the basics of the current healthy generation, Health, traffic rules, the basics of life safety, health classes, Legal Education, Environmental Education, Media culture, economics and tax lessons.

Today, in developed countries, a lot of practical work is being done on the application of innovation and technology in the creation of new models of working with young people. In a rapidly changing world, the formation of such qualities as responsibility, obligation, legal consciousness and legal culture, thoughtful worldview, soundness, enlightenment, religious and national tolerance, spiritual, civil, cultural, social are the main issues on the agenda.

CONCLUSION

The teaching of subjects in the category of “the idea of national independence: basic concepts and principles”, which has a direct impact on the education of young people, requires a new approach to the educational process. In particular, in the education of young people, it is possible to correctly assess the complex geopolitical and ideological processes taking place in the world, to make the right decision in the solution of social problems, to teach the formation of clear goals that are associated with finding their place in life, as a result of which it is possible to prevent the This, in its place, taking into account the fact that the education of young people, which is an important factor in the political, socio-economic and cultural and spiritual development of the Republic of Uzbekistan, has personally risen to the level of public policy on the initiative of the president of the Republic of Uzbekistan, demanded the need to improve principled approaches.

REFERENCES

1. [«Uzluksiz ma'naviy tarbiya konsepsiyasi» ishlab chiqildi \(kun.uz\)](#)
2. [Uzluksiz ma'naviy tarbiya konsepsiyasi tasdiqlandi – Gazeta.uz](#)
3. [Uzluksiz ma'naviy tarbiya konsepsiyasi tasdiqlandi - Daryo](#)
4. [422-coh 06.07.2020. Umumiy o'rta ta'lim muassasalarida “Tarbiya” fanini bosqichma-bosqich amaliyotga joriy etish chora-tadbirlari to'g'risida \(lex.uz\)](#)

SOME COMMENTS ON THE ROLE OF WEBSITES IN THE ECONOMIC PROCESS

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ABSTRACT

A number of effective measures are being taken in our country to ensure the rule of law, reliable protection of the rights and interests of individuals, the gradual democratization of the judicial system, the development of small business and entrepreneurship. In order to further develop the work in this area, measures are being taken to further increase the provision of interactive public services to individuals and legal entities, to ensure openness and transparency of government agencies, to reduce financial costs. In today's technology age, it is difficult to imagine our lives without information and communication technologies.

Keywords: *economic process, information and communication technologies, management.*

However, the level of introduction and use of information and communication technologies in the courts is still low. The Uzbek Human Rights Report 2019, published only by the US Embassy in Tashkent, provides information on the websites of the judiciary. According to him, Uzbekistan has continued to broadcast court hearings live, with such broadcasts usually limited to minor cases involving administrative offenses or economic cases [1]. Although the Supreme Court has tried to publish its decisions on its website, lower courts usually do not publish their decisions, which has made it difficult for lawyers to see previous evidence. It is gratifying that these issues are being addressed systematically.

As a logical continuation of important steps in the reform of the judicial system in recent years, the President of the Republic of Uzbekistan on August 30, 2017 "On measures to further improve the introduction of modern information and communication technologies in the judiciary" and 2020

Resolution No. PP-4818 of September 3 "On measures to digitize the activities of the judiciary". The adoption of these decisions has led to many positive changes in the use of information and communication technologies in the judiciary.

Introduction of modern information and communication infrastructure in the entire judicial system, development of information resources and information systems, their widespread and effective use, further introduction of electronic document management system in the courts, ensuring openness, transparency and efficiency of courts, quality of court proceedings and increasing the population's access to justice, conducting court-related work quickly and conveniently, without excessive hassle, and providing interactive services to individuals and legal entities through judicial websites are critical to the present and future. including video and audio recording of court proceedings, as well as the organization of new types of stenography of court proceedings [2].

Decree of the President of the Republic of Uzbekistan dated October 5, 2016 No 4848 "On additional measures to ensure the rapid development of entrepreneurial activity, comprehensive protection of private property and qualitative improvement of the business environment" In order to ensure reliable protection of the rights of entrepreneurs through the courts, transparency and impartiality, it is planned to gradually introduce mechanisms for audio and video recording of court hearings, as well as to post court decisions on websites [3].

According to Article 5 of the Code of Economic Procedure of the Republic of Uzbekistan, the court is required to adopt court documents in the form of decisions, rulings, decrees, court orders [4].

According to the Law of the Republic of Uzbekistan “On electronic document management”, an electronic document is an electronic document that is registered in electronic form, certified by an electronic digital signature and has other details of the electronic document that allow it to be identified. It is also stated that the electronic document flow consists of the sum of the processes of sending and receiving electronic documents through the information system.

Judicial documents that have entered into force under Article 11 of the Code of Economic Procedure are published on the official website of the court with the consent of the parties or anonymously, with the exception of court documents adopted in closed session. This means that the courts have the authority to publish court documents on websites.

Procedural procedures must be followed when posting court documents on websites. By posting court documents on websites, businesses can become aware of court documents. The posting of court documents on websites ensures the openness and transparency of the courts.

The decision of the Economic Court, which has entered into force, is handed over by the judge who heard the case to the specialist responsible for publishing it on the website. Expert recording is also used in the recording of court hearings by audio-video recording, as well as in the conduct of court hearings by videoconference. The specialist compiles a list of legally binding court documents, posts them on a website, and maintains an account. Judges of the Economic Court are responsible for the quality and content of the court documents submitted for publication on the website, as well as the chairmen of the economic courts for publication on the website.

Today, as a result of the electronic activities of the courts, the following electronic sites are functioning.

Today, as a result of the electronic activities of the courts, the following electronic sites are operating.

E-SUD – national electronic judicial information system,

my.sud.uz – interactive services portal [5],

exsud.sud.uz – sending appeals in electronic form, online monitoring of their consideration and receipt of court decisions in electronic form,

billing.sud.uz – electronic payment system The only electronic payment system for accounting of state duties and court fees,

public.sud.uz – “Collection of decisions” systematic publication of court decisions that have entered into force,

template.sud.uz – “Samples” placement of lawsuits and application forms for appeals to the courts,

calculate.sud.uz – “Calculator” electronic calculator that automatically calculates the state duty,

jadval.sud.uz – “Schedule of meetings” online to get acquainted with the list of cases assigned to the court session,

qabul.sud.uz – “Electronic reception” online registration for a personal reception of the leadership of the Supreme Court remotely,

my.sud.uz/monitoring – “Online tracking” online tracking of appeals,

vka.sud.uz – Remote participation in court hearings “Videoconferencing”.

Courts use these and other websites.

Based on the above, we should make the following suggestions and recommendations to improve the electronic activities of the courts.

First of all, it is necessary to create a website "Bank of Judicial Decisions".

Secondly, the Supreme Court of the Republic of Uzbekistan should adopt a plenum decision on audio-video recording of court hearings or make additions to a plenum decision.

Third, it is necessary to set a deadline for posting court decisions on websites.

Fourth, the introduction of electronic submission of documents to the court using the "My Judge" service in arbitration courts.

LITERATURE

1. Code of Economic Procedure of the Republic of Uzbekistan. (National Database of Legislation, September 17, 2021, No. 03/21/716/0877).
2. Law of the Republic of Uzbekistan "On electronic document management". (Collection of Legislation of the Republic of Uzbekistan, 2004, No. 20, Article 230; National Database of Legislation, April 21, 2021, No. 03/21/683/0375).
3. Resolution of the President of the Republic of Uzbekistan dated October 5, 2016 "On additional measures to ensure the rapid development of entrepreneurial activity, comprehensive protection of private property and qualitative improvement of the business environment" 4848- Decree (Collection of Legislation of the Republic of Uzbekistan, 2016, No. 40, Article 467; 2017, No. 37, Article 982; National Database of Legislation, November 26, 2018, No. 06/18/5582/2220; National Database of Legislation, 03.06.2021, No. 06/21/6240/0514).
4. <https://uz.usembassy.gov/uz/2019-country-reports-on-human-rights-practices-uzbekistan-uz/>
5. M.Mamasiddiqov. "Introduction of modern information and communication technologies in the work of courts - a guarantee of justice" <http://www.oxs.uz>.
6. Shavkatovich P. O. THE PROCEDURAL ASPECTS OF ELECTRONIC EVIDENCE IN CIVIL LITIGATION: EXPERIENCE OF UZBEKISTAN // PalArch's Journal of Archeology of Egypt / Egyptology. - 2020. - T. 17. - №. 7. - S. 9192-9199.
7. Худайберганов, Б. Б. (2016). Вопросы правового регулирования судебной санации как процедуры банкротства в Республике Узбекистан. Приложение к журналу Предпринимательское право, (3), 34-36.

USE OF MEDIATECHNOLOGIES IN TEACHING ENGLISH

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ABSTRACT

The emergence of the concept of a competence-based approach in European higher education entailed a reassessment of teaching methodology, including teaching a foreign language. The main goals and objectives of the new methodological approach in education were determined by the Commission "Common European Framework of Reference for Languages: Learning, Teaching, Assessment" (CEFR, 2001).

Key words: *“competence-based approach”, audiovisual, professional-critical practice, teacher, “Liberal Arts”.*

At the pedagogical level, this approach means a change in the paradigm of the teaching process, since the main emphasis is not on the transfer of knowledge by the teacher to the student, but on the activation of the role and motivation for students to search for information and learning keys.

At the methodological level, the specific goals of training programs within the "competence-based approach" are determined depending on the acquired competencies of future graduates. This statement of the problem is absolutely consistent with the structure of multidisciplinary education, or, since there is a practice of English notation, - the "Liberal Arts" system.

The complex of educational disciplines "Liberal Arts" means "subjects and skills that in classical antiquity were considered fundamental for the competence of a free person who takes an active part in social and creative life, what in Ancient Greece included participation in political, social, philosophical discussions, defense in court, participation in construction, military service." Grammar, rhetoric, geometry, arithmetic, logic, astronomy formed the basis of Liberal Arts.

In the modern world in the era of globalization of the economy and communications, the development of cooperation in all areas of social, political and cultural life, there can be no doubt that English - the language of international communication, the Internet, science and technology - is an integral part of multidisciplinary education.

One of the principles of the competence-based approach in teaching a foreign language at a technical university is "the formulation of learning objectives based on the end result, i.e. the acquisition of knowledge, skills, attitudes, values and / or competencies for students to master with subsequent application in practice after completing the academic period "(CEFR Methodology).

In this regard, in our opinion, the process of teaching a foreign language in a non-philological university, including engineering specialties, should be structured depending on and in accordance with specialized educational programs. As part of the bachelor's degree in engineering, foreign language training lasts 3 years. The "competence-based approach" technology implies the planning of educational material, focusing on three stages of training, depending on the tasks set: general training, the basics of phonetics, grammar, conversational practice; specialized training - skills of selection, scanning, reading texts in the specialty, annotation, preparation of messages in the specialty; socio-professional training - an advanced level of language proficiency, which includes the ability to listen and understand lectures in a foreign language, participate in seminars and discussions on professional topics, make presentations in the specialty.

In the first stage of linguistic training, the main task is to develop general communication skills - i.e. general competence (speaking and reading comprehension skills).

The second stage, the stage of specialized training, includes initiation into specialized communication: mastering professional vocabulary units and structures of technical discourse, pragmatic understanding of texts, annotation and discussion of what has been read.

The third stage - the stage of socio-professional training implies further improvement and development of the acquired skills, namely the development of the skills of oral and written discourse, given by the proposed circumstances. This is the sociolinguistic competence in the field of language teaching; full possession of it will allow students to be involved in the process of academic mobility, and also make it possible for future specialists to participate in international projects and scientific activities.

LITERATURE

1. Домченко Е. А. Технология развития критического мышления в учебно-воспитательном процессе учитель английского языка// Молодой ученый. — 2015. — №23. — С. 946-948. — URL <https://moluch.ru/archive/103/23578/>
2. Жамолдинова О.Р. Ёшлар соғлом турмуш маданиятини ривожлантиришда узвийлик ва уздуксизлик тамойиллари амал қилишнинг педагогик механизмлари тақомиллаштириш. Автореф. пед. фан. докт. ... дисс. — Тошкент, 2015. — 86 б.
3. Журин А.А. Интегрированное медиаобразование с курсом химии средней школе. — Москва: Бином, 2013. — С. 405



PATCHMATCH BASED TREE-SEED FUZZY CLUSTERING FOR ISCHEMIC STROKE LESION SEGMENTATION IN BRAIN MR IMAGES**¹Mr. Tushar R. Sangole, ²Dr. Amit K. Gaikwad, ³Dr. Vinod M. Vaze**Research Scholar, JJTU, Rajasthan, India¹, Associate Professor, SIT Kolhapur², Department of Computer Science JJTU, Rajasthan, India³tusharsangole@gmail.com**ABSTRACT**

Ischemic Stroke Lesion (ISL) arises when the artery of the brain gets blocked. The blood provisions nutrients and oxygen to the brain and take out carbon dioxide and other waste cells. In case an artery gets congested, the brain cells will not be able to function and will ultimately stop functioning (Khoshnam SE et al 2017). Nerve symptoms and symptoms of IS usually occur abruptly but can also be sometimes progressive in nature. Signs and symptoms vary based on the position of the occlusion and the flow (Sommer CJ 2017). Atherosclerotic stroke is generally found in elders, and arises without symptoms in 80% of the cases. IS can be initiated by a variety of ailments, like contraction of the arteries head or neck region (Jiang X et al 2018). This is usually produced by atherosclerosis, deposition of cholesterol, or generation blood clots which arise as a consequence of rapid heartbeat, heart attack, damages in heart valve, or some other underlying origins, including drug overdose, severe blood vessel injury in the neck, or abnormal blood flow (Renna R et al 2014). MRI is extensively utilized to identify cerebral ischemia.

Medical imaging procedures are used to obtain images of various regions of the human body for analyzing the condition and for further treatment. MRI is a scheme for getting comprehensive images of the interior organs, as well as the muscles of the brain & spinal cord. It is first utilized to picture body image and bodily functions (Liu J et al 2014).

Since the brain manages whole functions of the human body, the brain is considered to be one of the significant organs of the body. Several illnesses like infections, tumors, and strokes affect the brain. In addition, tumor brain may be a noncancerous or cancerous group or abnormal cell growth in the brain. Methods like MRI can be employed for detecting brain tumors. Lately, MRI scans have gained attention due to the requirement for a better evaluation of huge amounts of information (El-Dahshan et al 2014). Obtaining brain samples and automated classification of brain cells from MRI scans is important both in medicine and in experimental studies of common and diseased brain tumors. The most significant step in the fabrication of medical imaging is segmentation, which separates the matters in the image for processing.

Keywords: Patch match, Tree seed, Ischemic Stroke lesion, lesion segmentation**INTRODUCTION**

Annually, approximately sixteen thousand new cases of brain tumours are discovered in people all over the world. According to the NHS, the global incidence of brain tumours has greater than before, and it is now a major concern (brain Tumour studies 2019). Gliomas of the brain and critical fearful device account for up to 30% of all gliomas; roughly 80% of these are spiteful gliomas (Goodenberger and Jenkins 2012). This discovery demonstrates the high cost of a well-planned tumour treatment. Given the wide variety of brain tumours that exist around the world, primary brain tumours are extremely rare. Tumors typically begin in the brain or a

primary anxious device and only hardly, such as the liver or lungs, are extremely uncommon. The vast majority of these tumours have spread (Paolillo and Schinelli 2015). As a result, depending on the histological appearance of the tumour, most initial brain tumours are classified as the two types of grades that are named as LGG and HGG.

Surgery, radiation therapy, and chemotherapy are all used in the treatment of gliomas by clinicians. Tumor treatment outcomes are influenced by the location, kind, and severity of the tumour. Because of this, tumour segmentation plays a essential part in the development of surgical procedures and conduct plans. Clinical imaging modalities identify and assess tumours. To assist with surgery and radiotherapy planning, selecting the optimal treatment for a certain clinical diagnosis is necessary (Fink et al. 2015). While looking for the target volumes' contour on C-MRI (conventional magnetic resonance imaging), it can be useful for radiotherapy planning for high-grade gliomas (a type of brain cancer) (Niyazi et al. 2016). Through spatial information integrated throughout several go-sectional images, the MRI 3-d slice illustration decreases mistakes in medical practise while also assisting radiologist in seeing 3-dimensional anatomy from go-sectional photographs (Wu et al. 2010). Tumor assessment necessitates manually drawing a circle around the target area to capture the full 3-D quantity of the tumour. Although manual tumour margin segmentation Time-consuming when applied appropriately, semi-automatic processes can reduce the time required each slice to less than 2 minutes. minutes per tumour and can take up to sixteen minutes per tumour (Odland et al., 2015) Visible detection by humans elements in a photograph capabilities is also limited, increasing the likelihood of human error during guide segmentation. Furthermore this means that, for large MRI datasets, computerized segmentation will always be useful. An ischemic stroke is a chronic condition that often results in mortality. After the start of symptoms, many medical imaging modalities are available to aid in the diagnosis of stroke. When it comes to stroke analysis, time is of the key since the window of opportunity for treatment is quite narrow (about 3 hours following the beginning of similar concerns). The study and investigation related to this topic in current time with objective to get the early medication on in the early stages of the disease using Visual evaluation of DWI scans is challenging because taking different types of scan of brain in various stages of various sections at different time periods and locations is quite difficult and in concern to that it will be challenging task to get over its results in order to do the early medication that will effect to stroke, which further complicates the situation. As a result, an automated system that can reliably detect stroke lesions in DWI data will aid doctors in making more accurate diagnoses. This is the main point of the thesis.

A change in one of the acquisition parameters (the b-value) produces a new DWI scan with a different contrast. SNR is lowered while using DWI with higher b-values since they give superior sensitivity, more conspicuity of stroke lesions, and fewer artefacts. In addition to the diffusion weighted images or scans that we are performing with the human brain in various coefficients might also be made out. These scan images will provide different types of conclusions as well to take into various results of the maps generated with considering all these facts we will get to a particular solution of values that needs to be taken out from the various scans we have performed and that was difficult to start with the medication thus we suggested this new technique that will accurately show the location of brain tumor so that early medication will be started on the basis of new technologies and the events of machine learning technologies that can be used.

In most cases, the symptoms of a stroke reveal themselves immediately, albeit they may sometimes exhibit themselves gradually. During the initial stages of a stroke, some people may have mild symptoms such as forgetfulness, hearing loss, or vision degradation, as well as dementia or strange behaviour, among other things. Stroke may have disastrous consequences if not treated properly and promptly. Perhaps it will result in irreparable damage to the person's brain and spinal cord if improper treatment is not provided promptly and appropriately. It is possible for doctors to design treatment recommendations that are tailored to the specific needs of each patient if they can identify where a stroke has occurred at an early stage of the disease process. Stroke in brain tissue can be detected with the help of minimal methods that are used in conjunction with techniques such as automated stereoscopic scanning, which are illustrations of imaging techniques in which the damaged tissue exhibits properties that are distinct from those of normal cerebral matter. MRI is one of the most often used techniques to establish the presence of a stroke lesion, the age of the lesion, and the location of the lesion since it is particularly sensitive and accurate in detecting bone areas, soft tissues, and aberrant lesions. CT, in contrast to MRI, is incapable of detecting tiny lesions. The limitations of human delineation have spurred the development of semi-automatic and automated systems for identifying lesions in magnetic resonance imaging (MRI) data. Stroke is a leading cause of mortality and disability around the world. Known as an ischemic stroke, this kind of A obstruction of the extracellular fluid arteries is what causes a stroke to occur, which results in the brain tissue being harmed by the stroke. Due to the fact that the size of the lesion is a key result for the purposes of clinical investigations, high-quality and reproducible segmentation is desirable. Despite the fact that this is a challenging job owing to important factors, It is a required friction, in the same way that general friction affects the appearance, location, and appearance of lesions.

METHODOLOGY

A computer-aided detection and classification method for MRI brain tumour images that distinguish between benign and malignant tumours. The image sharpening is performed on the T1-w image, while the anisotropic diffusion filtering is performed on the T2-w picture. The rationale for employing an unsharp mask to generate a sharp picture is because the clarity of the T1-w is explained by its sharpness, which is why it is necessary to use an unsharp mask. In a similar vein, the anisotropic diffusion filter reduces information loss by efficiently maintaining precise structures and object boundaries. For both axial T1-w and T2-w pictures, the alpha blending method is employed in the compositing process. This is accomplished by the use of the Enhanced Watershed Segmentation (EWATS) algorithm to segment the tumour region. Because, as previously said, whereas past research has utilised several MRI modalities as input, we were able to obtain the findings that we achieved while just training each MRI modality individually. This is because, as previously stated, previous research has used multiple MRI modalities as input. In contrast to previous research that has used all four MRI modalities as input, we were able to accomplish the findings that we achieved while just training each MRI modality independently. This is in contrast to other research that has utilised all four MRI modalities as input. Following our investigation, we determined that when our 3D model is confronted with a brain tumour, it is capable of accurately identifying it as such. Due to the network architecture's ability to gather exact 3D information on tumorous areas received from surrounding MRI slices ($j - 1, j + 1$) recorded using the same modality; the system achieves exceptionally high accuracy. This is made feasible by the network architecture's capacity to collect large amounts of three-dimensional information and store it in a centralised location, as previously stated. It is

necessary that the MRI slices ($j - 1, j + 1$) from the surrounding areas be of the same mode as the tumorous regions for the proposed method to be capable of retrieving reliable 3D information about tumorous sections from the surrounding areas when obtaining information about sections having tumors from MRI portions ($j - 1, j + 1$) from the tumorous regions. The convolutional layers can extract even more information as a result of this, which is particularly important when it comes to boosting the accuracy of brain tumour segmentation, as previously said. In addition to categorisation, there is also For the purpose of determining the precise position of a tumour in the brain, it was decided that the four highest feature maps from initial MRI scans would be utilised in combination with one another to establish the exact location of the tumour. It is possible to establish the location of the tumour in addition to the pixel intensity values obtained from those photographs. It is important to take into consideration the following factors: Because the hierarchical features contained finer information (at a higher resolution), they were utilised to produce the score maps for each SegNet model's final deconvolution layer. These score maps were then used to generate the score maps for each SegNet model's final deconvolution layer. Several hierarchical features of this layer enable the reliable identification of tumours at the cellular level, making it an excellent candidate for cancer detection. A breakdown of the layers that make up this structure is shown below: It is required to employ greater resolutions in order to be effective (in this case). BRATS 2017 training dataset was used to generate the evaluation findings reported in this chapter, which are shown in Table 5-4 for each of the four distinct types of magnetic resonance imaging procedures (MRI). Table 5-4 illustrates that SegNet_Max_DT outperforms the other two networks in terms of performance. Every one of the SegNet models evaluated in this study was a unique SegNet model. As described in Section 6.2.4, it was decided to categorise the sub-tumour regions based on their greatest qualities (highest scores) rather of their weakest traits (lowest scores) in order to avoid duplicating results (lowest scores). Because of this, SegNet_Max_DT may be able to provide the most accurate results.

In order to resolve this issue, the maximum feature maps of all SegNet models were pooled. Therefore, the classifier was only given with the strongest and most useful characteristics from all SegNet models, which resulted in enhanced performance for the classifier. Due to the fact that each imaging modality has its own set of features, it is necessary to understand how the features of each modality interact with one another, let alone which factors are most likely to improve segmentation results. In addition, when using a single complex model, it is more efficient to train several simple models rather than a single scalar model, as shown in the following example: For the second advantage, the recovery of attributes important to a SegNet model's unique modality may be achieved, allowing clinicians to get thorough information about the modality on which they would be executing their job. Additionally, extended scan periods are required to collect all of the numerous MRI modalities presently accessible in the field, which adds to the MRI restriction. The evaluation between open CV and current techniques revealed that the accuracy of this approach was the greatest and the execution time the shortest for the method under consideration. Open CV is a freeware library for machine learning and computer vision that may be downloaded from the internet

The data set [1] for ischemic stroke segmentation comprises data sets from five distinct hospitals in Singapore, the United States of America, Germany, and France. The data sets were collected from a total of 57 hospitals in Singapore, the United States of America, Germany, and France. Machines ranging from 1.5 T to 3 T, as well as GE, Siemens, and Philips, were used to collect the data sets. This data collection includes instances of lacunar

stroke, ischemic stroke with hemorrhagic transition, and non-lacunar stroke, among other types of neurological disorders. In order to identify Acute or Sub-Acute Ischemic Stroke lesions in the human brain using magnetic resonance imaging (MRI) or computed tomography (CT) images, a variety of classification methods can be used. The approach presented in this research deals with a variety of classification methods that can be used to identify Acute/Sub-Acute Ischemic Stroke lesions in the human brain using magnetic resonance imaging (MRI) or computed tomography (CT) images. As a result, it is effective in both visual and mathematical execution since it takes into account several factors such as the age at which the stroke happened, systemic blood pressure, collateral flow, as well as the type of therapy that was delivered. The strategy we utilised for picture segmentation made advantage of the knowledge gained during the training phase of Random forest classifiers, which helped us to segment photos more successfully.

In the year 2019, Sunil Babu and colleagues did research. Researchers have proved that they can identify and segment brain tumour stroke lesions, and that this has a significant influence on the medical profession by proving their findings. [1] The clinical diagnosis, prognosis prediction, and therapy of various illnesses are all affected as a result of this. Additionally, this tool may be used for general brain modelling, such as the production of brain atlases, as well as for anatomical modelling, such as the construction of brain atlases. Both of these tasks can be accomplished with reasonable simplicity using this tool. To evaluate functional impairments in stroke patients and to investigate sleep disturbances in stroke patients, it is necessary to have comprehensive information on the location and quantity of brain lesions detected. The strokes, hemorrhages with TIS are types of attacks that occur in general human beings. (TIAs-also called to as ministries). Ischemic However, whereas hemorrhagic stroke results from a significant increase in blood leakage, ischemic stroke results from a significant decrease in blood flow. Stroke will result in stoppage of blood supply to the brain thought to occur as the it results in the stoppage of blood flow the particular region, resulting in the end of brain tissue in that section of the brain. In the repercussion of an hamorrhage, other types of strokes are the most common types of stroke, and they are also the most dangerous types of stroke. Stroke caused by the gathering of some size of blood in the brain is known as thrombotic stroke, and it is recognised by the medical community as such. An embolic stroke [4] is a type of stroke that occurs when a blood clot forms in an artery. It is the nearly everyone frequent type of stroke and affects around one in every 100 people. When it comes to identifying the site of a stroke, CT scanning and MRI scanning are the multiple scanning modalities that are most commonly utilised in the medical sector. CT scanning is a type of scan that uses x-rays to determine the location of the stroke. There are two types of techniques that are used for scanning the brain of human that ara CT and MRI that are now available to the public (MRI). Because CT-dependent methods are having very minimum chances of correctness along with chances of repetations this population [5], it is particularly advantageous to employ MRI scanners for early diagnosis of brain infarction in older adults. When it comes to early identification of brain infarction, MRI scanners are particularly useful since they detect infarcts before symptoms appear on the brain. The development of a reliable technique for segmenting subacute ischemic stroke lesions is a crucial component of our current work, which is being carried out in tandem with other research projects at this time.

MACHINE LEARNING AND FEATURE EXTRACTION

When techniques were first developed, they comprised of three steps: pre-processing of magnetic resonance images (MR pictures), feature development, and withdrawal and organization. When pre-processing images, the

intermediate filter was employed for the purpose of improving the image quality while also maintaining the edges [37]. Image segmentation using clustering algorithms such as different types of clustering methods that are used for algorithms, others results in the generation of helpful features from images. When it comes to understanding and interpreting photographs, image segmentation is critical. Postoperative planning and matching, tissue categorization, tumour recognition, tumour volume calculation, blood cell segmentation, and blood cell delineation are all included are just a few of the many uses in brain imaging that it has to offer. In [17], a brain tumour segmentation technique is applied to 3D MR images by means of a CNN. [33] Proposes the application of a deep learning model with the purpose of automatically identifying anatomical structure of the brain. Using a combination of discrete Gaussian and higher-order patterns such as Markov-Gibbs patterns, random field classification is utilised in a voting technique for an ensemble of visual appearances such as intensity and adaptive form modes, as well as in other applications. [32] Describes the development of a cross shallow auto-encoder combined with a Bayesian fuzzy clustering-based segmentation technique. Following denoising with a non-local mean filter, a Bayesian fuzzy clustering strategy is a method that was applied in this research for the purpose of classifying brain tumours. The approach is described in detail below. In [11], the 2D MRI images are partitioned into the left and right hemispheres, and statistical parameters such as mean, homogeneity, absolute value, and inertia are generated for the Support Vector Machine (SVM) classifier before being fed into the classifier. Because of the large amount of features in step two, most studies include an additional step to extract features that contain more significant information using methods such as principal component analysis (PCA), SIFT detectors, and SURF descriptors [18], which are described below. In [10], after performing a hybrid feature extraction using a covariance matrix, a regularised extreme learning approach is utilised to categorise brain abnormalities and determine its severity. Using evolutionary styles similar as flyspeck mass optimization (PSO) to pick from a pool of features is known as evolutionary optimization is also discussed in [30]. On image analysis, classification methods such as k-nearest neighbours, decision trees, Support Vector Machine (SVM), the Naive Bayes, expectation-maximization, and the random forest are the most commonly used machine learning techniques [38]. Features are extracted for a hybrid Functional Near-Infrared Spectroscopy (fNIRS) and Electro Encephalo Graphy (EEG) brain-computer interface in [14] and categorised using SVM and Linear Discriminant Analysis (LDA) (LDA). Convolutional Neural Networks (CNN) are becoming increasingly used in various fields, including medical imaging, video analysis, and natural language processing, for feature extraction in a variety of applications. Having the ability to recognise the most relevant patterns and information from the training images are called recognition ability is the most important feature of CNN's performance. For example, VGGNet [31], GoogleNet [36], and AlexNet [19] are successful image classification architectures that have been widely employed in medical pictures, such as brain abnormality detection. It is discussed in [4] how to perform pre-processing and data preparation using 3D filters and CNNs with multi-path and cascade designs. In order to create a range of new portraits of a person with diverse expressions and poses, pixel CNN architecture is used. In [39], a cascade of CNNs is used to iteratively generate a room decoration from the ground up. Because CNN has a significant computational cost, researchers are attempting to develop new, computationally simple models that are accurate in tumour classification while maintaining low computational costs. The use of an ensemble of tiny collaborative learners rather than a complicated network is a common strategy for meeting the needs of quick training execution and convergence, among other things. These peer networks' learning processes can be completely independent of one another or

they can be completely dependent on one another. A common machine learning objective is to estimate the distribution of data, which is one of the most challenging problems to solve. For example, there are hard-coded relationships between image pixels and their neighbours, which are impossible to identify without prior knowledge of the relationship. In this case, the auto-regressive models are data-driven estimators that discover such connections in a large amount of data. The better images created by these models are conditioned on noisy or incomplete data, and this is the output of the models. An acceptable density estimator is probable to be used to tackle a broad range of classification, regression, missing data, and other problems of this nature.

CONCLUSION

For the segmentation of ISL, we propose PatchMatch based Tree-Seed Fuzzy Clustering (PM-TSFC). Fuzzy C-means (FCM) clustering is a typical clustering procedure in machine learning and pattern recognition. For proper segmentation of ISL, each pixel should be allotted to the nearest cluster. To do this, we employ FCM to minimize the weighted distance between pixels & cluster centers. Moreover, the inclusion of Tree Seed Optimization algorithm helps to find the nearest optimal cluster center. This makes the proposed PM-TSFC to segment ISL with greater accuracy.

Below are the techniques that will be used while detecting the brain tumor from the images.

- Lesion Detection
- Data Pre-processing
- Lesion Segmentation

In experiments, it was discovered that 3D joint slices make use of additional 3D data information, which was supported by the findings. The strategy used by the SegNet Max DT model for picking the maximum number of features also appears to be promising, as it has the potential to enhance the configuration of our model over time. While the use of the BRATS 2017 dataset by SegNet Max DT produced better segmentation results.

Every image is subjected to histogram equalisation in order to improve the image quality and increase contrast. It is this algorithm that is used in the local area. The Radon Transform is applied to the image after it has been corrected for equalisation. This programme generates a 2-dimensional graph at a specific angle, and the image develops a pixel value beside a radial line in the same direction as the graph. They extracted features throughout the feature extraction procedure as a result of the presence of higher order spectra and numerous entropies. In feature ranking, a major feature can be listed first based on a metric that is used to determine its importance. Each type of linear discriminant analysis is classified into one of three categories.

REFERENCES

1. Abulnaga SM, Rubin J. Ischemic stroke lesion segmentation in CT perfusion scans using pyramid pooling and focal loss. In International MICCAI Brainlesion Workshop 2018 Sep 16 (pp. 352-363). Springer, Cham.

2. Acharya UR, Meiburger KM, Faust O, Koh JE, Oh SL, Ciaccio EJ, Subudhi A, Jahmunah V, Sabut S. Automatic detection of ischemic stroke using higher order spectra features in brain MRI images. *Cognitive systems research*. 2019 Dec 1;58:134-42.
3. Babu MS, Vijayalakshmi V. A review on acute/sub-acute ischemic stroke lesion segmentation and registration challenges. *Multimedia Tools and Applications*. 2019 Jan 1;78(2):2481-506.
4. Babu MS, Vijayalakshmi V. An Effective Approach for Sub-acute Ischemic Stroke Lesion Segmentation by Adopting Meta-Heuristics Feature Selection Technique Along with Hybrid Naive Bayes and Sample-Weighted Random Forest Classification. *Sensing and Imaging*. 2019 Dec 1;20(1):7.
5. Bertels J, Robben D, Vandermeulen D, Suetens P. Contra-lateral information CNN for core lesion segmentation based on native CTP in acute stroke. In *International MICCAI Brainlesion Workshop* 2018 Sep 16 (pp. 263-270). Springer, Cham.
6. Bharathi PG, Agrawal A, Sundaram P, Sardesai S. Combination of hand-crafted and unsupervised learned features for ischemic stroke lesion detection from Magnetic Resonance Images. *Biocybernetics and Biomedical Engineering*. 2019 Apr 1;39(2):410-25.
7. Binaghi E, Omodei M, Pedoia V, Balbi S, Lattanzi D, Monti E. Automatic Segmentation of MR Brain Tumor Images using Support Vector Machine in Combination with Graph Cut. In *IJCCI (NCTA) 2014* Oct 22 (pp. 152-157).
8. Chen W, Liu B, Peng S, Sun J, Qiao X. S3D-UNet: separable 3D U-Net for brain tumor segmentation. In *International MICCAI Brainlesion Workshop* 2018 Sep 16 (pp. 358-368). Springer, Cham.
9. Chen, X., & Pan, L. (2018). A survey of graph cuts/graph search based medical image segmentation. *IEEE reviews in biomedical engineering*, 11, 112-124.
10. Chin CL, Lin BJ, Wu GR, Weng TC, Yang CS, Su RC, Pan YJ. An automated early ischemic stroke detection system using CNN deep learning algorithm. In *2017 IEEE 8th International Conference on Awareness Science and Technology (iCAST) 2017* Nov 8 (pp. 368-372). IEEE.
11. Dong H, Yang G, Liu F, Mo Y, Guo Y. Automatic brain tumor detection and segmentation using U-Net based fully convolutional networks. In *annual conference on medical image understanding and analysis 2017* Jul 11 (pp. 506-517). Springer, Cham.
12. El-Dahshan ES, Mohsen HM, Revett K, Salem AB. Computer-aided diagnosis of human brain tumor through MRI: A survey and a new algorithm. *Expert systems with Applications*. 2014 Sep 1;41(11):5526-45.
13. Feng X, Ye G, Cao R, Qi P, Lu J, Chen J, Wang D. Identification of Predictors for Hemorrhagic Transformation in Patients with Acute Ischemic Stroke After Endovascular Therapy Using the Decision Tree Model. *Clinical Interventions in Aging*. 2020;15:1611.
14. Gautam, A., & Raman, B. (2019). Segmentation of ischemic stroke lesion from 3d mr images using random forest. *Multimedia Tools and Applications*, 78(6), 6559-6579.
15. Griffis, J. C., Allendorfer, J. B., & Szaflarski, J. P. (2016). Voxel-based Gaussian naïve Bayes classification of ischemic stroke lesions in individual T1-weighted MRI scans. *Journal of neuroscience methods*, 257, 97-108.

16. Gupta, A., Vupputuri, A., & Ghosh, N. (2019, July). Delineation of Ischemic Core and Penumbra Volumes from MRI using MSNet Architecture. In 2019 41st Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC) (pp. 6730-6733). IEEE.
17. Huber T, Alber G, Bette S, Boeckh-Behrens T, Gempt J, Ringel F, Alberts E, Zimmer C, Bauer JS. Reliability of semi-automated segmentations in glioblastoma. *Clinical neuroradiology*. 2017 Jun 1;27(2):153-61.
18. Jiang X, Andjelkovic AV, Zhu L, Yang T, Bennett MV, Chen J, Keep RF, Shi Y. Blood-brain barrier dysfunction and recovery after ischemic stroke. *Progress in neurobiology*. 2018 Apr 1;163:144-71.
19. Kamnitsas K, Baumgartner C, Ledig C, Newcombe V, Simpson J, Kane A, Menon D, Nori A, Criminisi A, Rueckert D, Glocker B. Unsupervised domain adaptation in brain lesion segmentation with adversarial networks. In *International conference on information processing in medical imaging* 2017 Jun 25 (pp. 597-609). Springer, Cham.
20. Kamnitsas K, Ferrante E, Parisot S, Ledig C, Nori AV, Criminisi A, Rueckert D, Glocker B. DeepMedic for brain tumor segmentation. In *International workshop on Brainlesion: Glioma, multiple sclerosis, stroke and traumatic brain injuries* 2016 Oct 17 (pp. 138-149). Springer, Cham.



TEXTUAL FEATURES OF THE MANUSCRIPTS OF “MAHBUB UL-QULUB”

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ANNOTATION

This article discusses the manuscripts, ideological and artistic features of Mahbub ul-Qulub, one of Alisher Navoi's invaluable works, and the problems of its transformation.

Keywords: *Mahbub ul Qulub, prose, poetry, translation, interpretation, analysis, genre, byte, continent, rubai, manuscript.*

Alisher Navoi's Mahbub ul-Qulub is one of the most beautiful examples of Turkish prose and has attracted the attention of Navoi scholars for many years. Along with prose, this work contains unique gems of poetry. Therefore, the study of the text of this work, the art of its poetic texts, its poetic features is one of the most important and urgent tasks of Navoi studies. First of all, it gives a deeper understanding of the content and ideological content of the work "Mahbub ul-qulub", and secondly, it allows us to once again take a scientific look at the unique features of the prose works of Alisher Navoi.

In today's era of globalization, the text of a work of art has become the main object of analysis and interpretation in the science of literature. After all, the text is based on the author's worldview, concept of man and society, artistic and aesthetic principles, art, space and time, national thinking. In addition, the correct conversion allows you to evaluate the work of art objectively. Among the written monuments in the fund of the Institute of Manuscripts of the Academy of Sciences of Uzbekistan are the works of the great Uzbek poet and thinker, patron of culture and art Alisher Navoi. Thanks to Navoi's genius, the Turkic peoples living in different parts of the world have been isolated in the history of mankind, and the nation's spiritual heritage has taken a strong place in the world treasury.

Indeed, the life and literary heritage of Alisher Navoi have been studied and analyzed for five and a half centuries by literary, orientalist, and textual scholars of various nationalities. In particular, it embodies the socio-philosophical and moral views of Alisher Navoi. is achieved. One of such priceless works is "Mahbub ul Qulub", one of the most beautiful examples of Turkish prose, which has attracted the attention of textologists for many years. This work is a unique treasure trove of prose and poetry. Therefore, one of the important and urgent tasks of textual criticism is to transform and analyze the text of this work, to study the art and poetic features of its poetic texts. First of all, it gives a deeper understanding of the content and ideological content of the work "Mahbub ul-qulub", and secondly, it allows us to once again take a scientific look at the unique features of the prose works of Alisher Navoi.

In this regard, the service of textual researchers deserves recognition. However, the thorough study and preparation for publication of samples of our literary heritage at the level of today's demand, the elimination of errors in the translated works is one of the serious tasks facing the field of textual studies.

Mahbub ul-Qulub is one of the most widely read works in the past. This is evident from the prevalence of manuscripts. Today, Alisher Navoi's manuscripts are published in Leningrad, Tashkent, Dushanbe, Baku, Tbilisi, Yerevan, Ashgabat, Kazan, Samarkand, Bukhara, Kokand, London, Oxford, Cambridge, Dublin, Berlin, Munich, Vienna, Paris, Rome, Upsala, It is kept in the Oriental Manuscripts Fund in New York, Philadelphia,

Istanbul, Tehran, Kabul, Hyderabad, and Cairo. A catalog of scientific descriptions of Navoi's works kept in the collections of Oriental manuscripts is published in the catalogs. The Institute of Manuscripts of the Academy of Sciences of Uzbekistan also began publishing scientific works in 1979 in its manuscript fund. As a first step in this direction, a scientific description of Alisher Navoi's manuscripts in the manuscript fund of the institute was compiled. As of December 31, 1980, the Institute of Manuscripts has 175 volumes of Alisher Navoi's works.

There are 19 copies of this work in the manuscript collection of the Institute of Oriental Studies. However, there are few ancient manuscripts of the work. Three of the manuscripts known to science date back to the 16th century, and the rest to the 18th-19th centuries. A copy of Mahbub ul Qulub from 1565 to 1566 is in the National Library of Paris, a perfect copy is believed to have been copied in the 16th century in St. Petersburg, and a copy from 1595 to 1596 is in St. Petersburg, named after Saltikov-Shchedrin. Stored in the State Library. The work was published in 1939 in Tashkent. In Mahbub ul-Qulub, Navoi directly assesses almost all social groups and strata of his time and explains which of them is good or bad, and which is beneficial or harmful to humanity, the people and the country, more broadly, deeply and more clearly than in his other works. According to literary critics, Mahbub ul-Qulub is one of Navoi's most complex works. It is not written for those who are looking for a toy in the literature. Everything here is spoken from the heart, thought out, weighed in the mind, and therefore requires the reader to be serious and thoughtful. Therefore, creating a perfect translation of the work and making it available to the public is one of the most pressing and urgent issues facing today's researchers.

Mahbub ul-Qulub has been studied by textual scholars for many years and has been published several times. In particular, it was first modified by Navoi scholar Porso Shamsiyev. However, there are serious shortcomings in this conversion. Later, with the focus on this area, these shortcomings began to be addressed. The next version of the work was published by Kholida Akhrorova in 2020. However, there are a number of shortcomings in the text of the work, including the poetic texts. Some are technical errors, some are spelling errors, and some are textual errors that affect the content.

The study of Mahbub ul-Qulub from different perspectives is a process that has been going on for a century and a half, and each period has its own achievements and shortcomings in the field of literature and the scholars who represent it. This is sometimes due to the dominant ideology and its limitations, sometimes due to the fact that the perfect text of the work has not been created, and sometimes due to simple negligence.

A common feature of Mahbub ul Qulub's manuscripts is that the titles of Mahbub ul Qulub, the names of the poems, the punctuation between the lines and sentences are done in red ink. And many of them are copied in plain Nasta'liq script. There are races on all the sheets. White, thick, and thin paper was used. The text was written in black ink. The copy was copied without any ups and downs. In this regard, they are the only unique sources in the history of Central Asian calligraphy to identify and investigate the use of various scripts in the history of Central Asian calligraphy. The texts are in two columns. At the beginning of both works in the manuscript (vv. 1b, 193b) there is a beautiful golden plate. The text is enclosed in an elegant yellow gold table, with a solid red frame for both pages. The first, thick cardboard, stamped, red cover. Differences of Manuscripts: Existing manuscripts have been copied by different calligraphers in different countries, and the manuscripts that have survived to this day have been preserved in different ways, so there are moderate and

poorly preserved copies among them. Sources also differ in the number of pages and the size of the text. The manuscripts of Mahbub ul Qulub, described by the Navoi scholar Muhammadjon Hakimov, are given in detail below: A common feature of Mahbub ul Qulub's manuscripts is that the titles of Mahbub ul Qulub, the names of the poems, the punctuation between the lines and sentences are done in red ink. And many of them are copied in plain Nasta'liq script.

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In short, the great artist of words, the pride of our nation Alisher Navoi, began the tradition of creating works in harmony with the development of Turkish prose, prose and poetry, which has a long and rich tradition, and brought it to the level of perfection. The teachings in the book have not lost their value for centuries because they are taken from life, and as long as the human race lives on earth, their importance will not diminish, but will increase. After all, man's natural and spiritual aspirations are almost the same in all ages and societies. It contains the thoughts, philosophical generalizations, and life conclusions of a scholar who has mastered all the sciences of his time, a sage who has traveled the world, and a thinker who has spent a lifetime thinking about the nature of the universe and man. It is the summation of the dreams, hopes and aspirations of the person responsible for the destiny of mankind, who wants to see the world as perfect, full of life and perfect.

In general, this manuscript contains the thoughts, philosophical generalizations and life conclusions of a scientist who has mastered all the sciences of his time, a world-renowned sage, a thinker who has spent a lifetime thinking about the nature of the universe and man. The dreams, hopes and aspirations of the person who is responsible for the destiny of mankind, who wants to see the world as perfect, as life-giving, as perfect. From the above general description, it is clear that the study of the work "Mahbub ul-qulub" from different perspectives is a process that has been going on for a century and a half. there are advantages and disadvantages. This is sometimes due to the dominant ideology and its limitations, sometimes due to the fact that the perfect text of the work has not been created, and sometimes due to simple negligence.

REFERENCES

1. Description of the manuscripts of M. Hakimov Navoi's works. Tashkent, Fan. Page 3
2. Hayitov SH. Sufi reflections in Mahbub ul-Qulub. - Tashkent: Fan, 1996.
3. Rustamov A. Navoi's artistic mastery. - Tashkent: Fan, 1977.
4. Vakhidov R., Eshonkulov H. History of Uzbek classical literature. (Textbook) - T New Century, 2006

A SURVEY ON MONITORING SOCIAL DISTANCE USING WEARABLE OR IOT SENSOR DEVICES

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ABSTRACT

Coronavirus has infected millions of individuals around the world, and the number of sick persons keeps growing up. The virus is passed from person to person via direct, indirect, or close contact with infected individuals. This research survey introduces a smart social distance system that allows individuals to maintain social distances between others in both indoor and outdoor contexts, preventing COVID-19 exposure and limiting its spread locally and throughout the country.

Also difficult to identify the Covid-19 patient activities such as symptom prediction, identification and monitoring of isolated people. Due to its deeply entrenched sensing capability and easy communication, the Internet of Things (IoT) platform is recommended for achieving this goal. Smart healthcare, smart homes, and smart cities are all utilising IoT technology to create a more convenient and intelligent community. This survey gathered how the Internet of Things (IoT) could be integrated into an epidemic prevention and control system and

Keywords: *Social distance, wearable sensor, IoT sensor, Coronavirus and disease.*

1. INTRODUCTION

The Internet of Things (IoT) has played a vital role in a variety of healthcare applications during the current COVID-19 tragic situation. In general, IoT networks are made up of a variety of small, low-cost, and low-power devices that can be attached to anyone or incorporated in any object. People who are at a higher risk of COVID-19-related severe sickness need to keep their distance from others. To prevent the virus from spreading, keep a safe distance of at least 1 meter between yourself and other people in both indoor and outdoor places. It also restricts close contact with others in both outdoor and indoor environments, because people can transfer the virus before they realise they are infected [1, 2].

Recently, social distance has been shown to be a successful strategy for limiting COVID-19 spreading. As a result of the social distance, researchers and engineers have been prompted to build technological methods to combat the transmission of the COVID-19 virus [3-5]. To combat the spread of COVID-19, several mobile applications and Internet of Things devices have recently been developed. The current outbreak of COVID-19 has imposed drastic changes to different sectors of society and demonstrated the impact that diseases respiratory infections impose in a world intimately connected. Unprecedented containment and mitigation policies have been implemented in an effort to limit the spread of COVID-19, including travel restrictions [6], isolation, and quarantine [7] and closure of shared spaces [8].

The remainder of the survey is defined as follows: Section 2 is gathered a survey of research literature over the recent years in this area of social distance monitoring, as well as related efforts, with an emphasis on image classification techniques. Section 3 discusses about what are the sensor or devices required for monitoring and

maintaining the social distance. Section 4 is focused to current research related to social monitoring system, and Section 5 is focused to conclusions and future scope of this research.

2. LITERATURE SURVEY

To prevent COVID-19 from spreading, many digital tools are being researched and created. The current social distance monitoring and warning methods are discussed in this section. Wearable social distance systems and standalone social monitoring systems are the two types of solutions now available, as shown in the Figure 1.

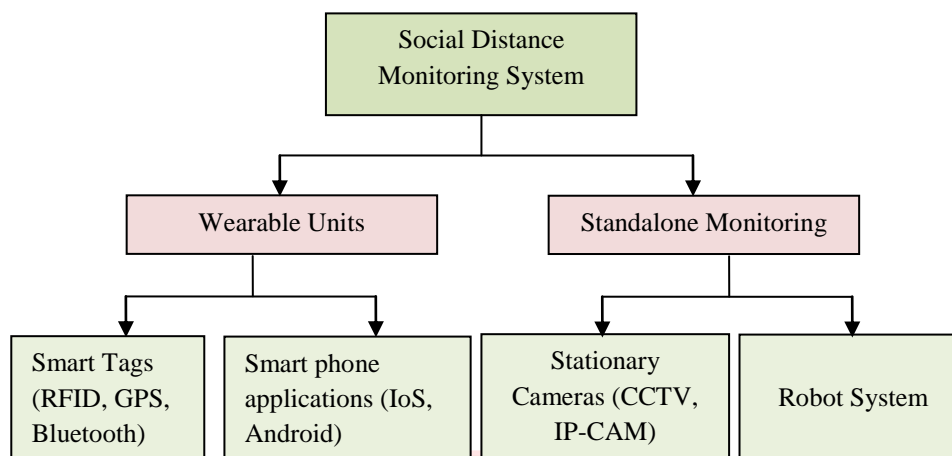


Fig. 1 Social distance monitoring types

The existing research attaching a tag to a person (user) in order to calculate the distance between them and the individuals in their immediate surroundings. On the other hand, the latter is based on image processing methods and uses stationary or mobile equipment to monitor social distances between people in a given region. To begin, wearable-based systems are evaluated using one of two approaches: smart tags (RFID, GPS, or Bluetooth) and smart phone applications (IOS or Android). These methods must be associated to a user in order to make distance measurements and send out warning notifications when that user enters a busy area.

Cunha et al. [9] developed a small and low-cost wearable electronic device that estimates the proximity distance between users based on the Received Signal Strength (RSS) of Wi-Fi signals emitted by other wearable devices of the same type, and then issues a notification when the distance between the users is less than a predefined threshold value. Bian et al. [10] developed a wearable, magnetic field-based proximity sensing system to track social distances between people. The authors built a small-size node that could detect people approaching from a distance of (1.5–2.0 meters), and the nodes were tested in a controlled lab and in a real-life large retail area. The proposed device has a detection range of more than 2 metres and is durable enough for use in everyday situations.

To prevent the transmission of COVID-19 infections, Kobayashi et al. designed a social distance monitoring system for students on a university campus [11]. To give access to the campus, the suggested system consists of ESP32-based microcontroller nodes distributed among students. With the help of mobile Bluetooth and a mobile camera, Neelavathy et al. presented smart social distance (SSD) mobile application-based monitoring that can predict the social distances between two people [12]. To anticipate the social distance, the SSD application has two main components. It does two things: first, it uses deep learning to identify pedestrians in video frames, and then it uses image processing algorithms to determine the distance between the two walkers. The developed programme can also estimate the received signal strength to calculate distance using BLE. A

mobile phone application and a wearable device are part of an IoT-based social distance monitoring system developed by Jahmunah [13]. The mobile application comprises of a collection of contact tracking apps that may gather and evaluate data. Lubis [14] proposed a BLE-based proximity-based COVID-19 contact tracing system that can track and regulate COVID-19 propagation in the local community. The designed device tracks people's vicinity and then syncs the information with their smartphones.

On the other hand, numerous wireless sensor network-based localization and tracking systems developed [15–17], which can be used to measure the distance between persons indoors and hence alerts users in congested regions. The Received signal strength indicator (RSSI) feature can be used to determine the distance between sensor nodes, allowing for the detection of densely populated areas.

Similarly, standalone social monitoring systems based on stationary or mobile devices scattered across the study area have been considered to assess social distances between people by evaluating photos captured by fixed or mobile digital cameras. Digital cameras and robot systems are examples of this. Ahmed et al. [18] suggested a deep learning platform for social distance monitoring based on the YOLOv3 object identification paradigm for recognising persons in video sequences and estimating the distance between people in open-space areas. Al-Khazraji [19] proposed a smart monitoring physical distances system that can track people's physical distances and provide them with appropriate feedback. The proposed technology counts how many people are in a given region and calculates their distances. The system then sends out warning signals to the person who is not keeping to the social distance.

As we described above, various researchers have been undertaken in order to create a better and more effective social distance monitoring system, but no one has concentrated on IoT sensor based social monitoring system. Aside from that, no real-world unit social distance monitoring solution has been discovered. This article primarily focuses on IoT sensor and wearable sensors in order to provide a real-world model social distance monitoring approach that streamlines social distance monitoring chores to aid in this fatal situation.

3. IOT SENSOR AND WEARABLE SENSOR FOR MONITORING SOCIAL DISTANCE

Wi-Fi, cellular, Bluetooth, Ultrawideband, GNSS, Zigbee, and RFID are among the wireless technologies that can be used to enable social distancing. We will go through the basics of these technologies in this part, and then discuss how they can help people practise social distancing by enabling, encouraging, and enforcing it [20–22]. From that, we go over the technologies' prospective uses, benefits, drawbacks, and feasibility. The workflow of social monitoring system using IoT sensor is shown in Figure 2.

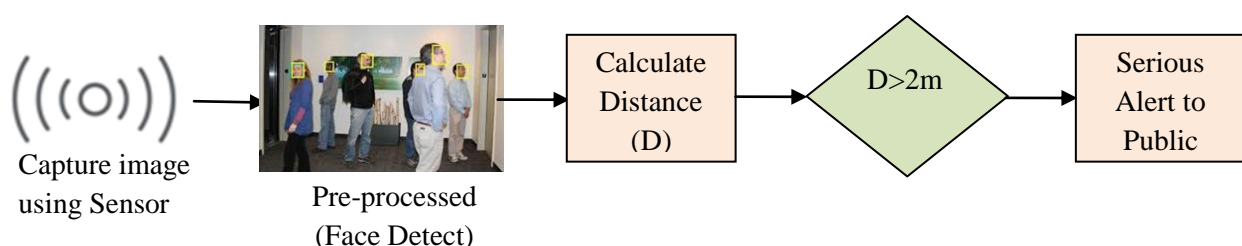


Fig. 2 Workflow of social monitoring system using IoT sensor

3.1. Bluetooth

Bluetooth technology is one of the remedial measures for social distancing in both indoor and outdoor situations, thanks to the increasing rise of Bluetooth-enabled devices. Bluetooth is a wireless technology that operates at frequencies ranging from 2.4 to 2.485 GHz and is used for short-range wireless communications. Bluetooth Low Energy (BLE) was recently released as an extended version of conventional Bluetooth with the goal of reducing device energy consumption and improving communication performance [23]. In light of the foregoing, BLE localization technology has a number of advantages over Wi-Fi localization. For starters, BLE signals have a higher sample rate (i.e., 0.25 Hz to 2 Hz) than Wi-Fi signals. Second, BLE technology consumes less power than Wi-Fi technology, allowing it to be widely deployed in mobile devices.

3.2. RFID

RFID is essential for real-time object tracking and localization. The three major components of an RFID localization system are RFID readers, RFID tags, and a data processing system. RFID tags are often divided into two categories: active tags and passive tags [25]. A passive RFID tag is powered by the electromagnetic field created by the RFID reader and does not require any external power. An active RFID tag, on the other hand, has its own power source, such as a battery, and broadcasts its own signals continually. In most localization systems, active RFID tags are used. As a result, RFID technology can be seen of as a possible tool for social distance. Based on new RFID-based localization technologies, one possible application of RFID technology is locating users in the indoor environment. To that purpose, each user is given an RFID tag, which can be found on the staff ID or member cards. The RFID reader can determine the user's location based on the backscattered signals from the RFID tag. If there are too many people in a given place, the system can alert authorities, who can then take necessary measures, such as forcing people to leave to exercise social distancing.

Similarly, RFID is used to monitoring social distance in public place like super market or building. An RFID reader will be installed at the main gate of a location, and users will be given RFID badges (can be either active and passive tags). When the RFID reader sends RF signals, the users' tags can broadcast their ID (active) or send their ID (passive). The RFID reader may receive a user's ID and increment the counter value when the user enters the location. As a result, the RFID reader can estimate the number of persons present. If there are too many people, the system can alert the local manager, who can then have people line before entering to exercise social distancing. This approach can be used in supermarkets or workplaces where consumers and employees typically have member/staff ID cards with RFID tags.

3.3. GLOBAL NAVIGATION SATELLITE SYSTEMS (GNSS)

In today's outdoor environment, the GNSS system is the most extensively utilised for positioning. GNSS satellites orbit the Earth and transmit navigation signals continually [26]. When a receiver receives navigation messages from satellites, it uses the transmitting time in the messages to determine the distances between its location and the satellites. Essentially, at least three different navigation messages from three different satellites are required to calculate a user's current location. In practise, however, at least four distinct communications from four satellites are necessary to calculate a user's location with good accuracy. Some GNSS systems currently have a precision of less than 1 metre. As a result, GNSS systems are a very promising answer for enabling the practise of social distancing.

GNSS technology is particularly beneficial for tracking people to exercise social distancing because of its remarkable qualities in locating people, especially in outdoor contexts. In particular, most smartphones now include GPS devices that can be used to track the position of mobile users when necessary. People suspected of being contaminated, such as those returning from an infected location, will be obliged to self-isolate in the event of a pandemic outbreak, such as COVID-19. As a result, authorities can ask these individuals to wear GPS-based locating devices to ensure that they do not leave their homes while under quarantine.

4. CURRENT RESEARCH IN SOCIAL DISTANCE MONITORING

IoT, big data, and AI, as well as the creative use of healthcare IoT in smart cities across China, Europe, and the United States, have all contributed in the fight against COVID-19. Continuous monitoring and rapid decision-making are now possible thanks to technology. The basic components of urban intelligence required in the event of a pandemic. Similarly, there is now a stronger commitment to the growth of numerous cutting-edge technologies to address various difficulties associated to the virus pandemic. We presented how several healthcare IoT technologies have evolved to combat and control the COVID-19 epidemic [27].

4.1. Drone Technology for IoT

Drones can be used to track the COVID-19 outbreak, including tracking those who have come into connection with COVID-19 patients. Drones are also useful for enforcing and tracking patients who break quarantine, as well as ensuring that face masks are used. Drones, for example, were deployed in Hubei, as well as Europe and the United States, to guarantee that residents carefully followed lock-down and social distancing restrictions. Residents who were not wearing a face mask or following emergency protocols were also given instructions and warnings by drones equipped with cameras. Drones can also be used to monitor in-home patients or areas that are heavily sick from away. Drones, for example, have been used to carry life-saving supplies to medical personnel and to gather and transport samples for testing at nearby institutions.

4.2. H-IoT based AI

Artificial intelligence can be used to assess the challenge of infection as well as to screen residents [28]. Furthermore, AI may be used to educate computers to recognise, explain, and predict patterns using models based on large data, resulting in actionable awareness. For example, AI apps have been used to track and report residents' travel records from affected locations to the appropriate authorities. This is particularly useful in forecasting the virus's outbreak, as well as decreasing or halting the virus's spreading. Similarly, because there is a lot of misinformation about the virus on social media, AI-based systems can be trained to eliminate incorrect information. Furthermore, AI can be used to conduct more efficient medication and vaccine clinical trials. Additionally, AI has been used to create robots capable of doing online medical examinations/ AI assisted diagnosis on residents, as well as cleansing and sanitising the surroundings.

In China, AI-assisted CCTV cameras with face recognition capabilities were mounted in apartment doorways to guarantee that occupants followed quarantine laws and did not leave their houses. In addition, AI was used to undertake decentralised testing across Chinese cities to identify COVID-19 afflicted residents. Furthermore, companies such as Megvii Technology Limited, Baidu, and Sense Time have all developed AI-assisted contactless body temperature screening systems that may be put in public spaces to detect COVID-19 infection.

AI-assisted systems with contactless remote temperature screening, for example, can screen roughly 15 persons per second from a distance of 3 metres. In general, AI systems have aided in the production of equipment needed to combat the COVID-19 epidemic. It has also given respite for overburdened health-care systems.

4.3. Cloud Assisted IoT

Computer system resources, such as databases, networking, servers, and intelligence, can now be given over the internet thanks to advances in wireless and digital technology [29]. Cloud computing enables speedier and more flexible resources, as well as cost-effective and efficient infrastructure management. While most individuals were isolated from their usual lives during the COVID-19 epidemic, they were able to continue their digital lives thanks to apps like Zoom video, Google Meet, Google Cloud, Slack, Amazon Web Services, Netflix, and Microsoft Azure. Similarly, with healthcare-specific apps like Salesforce Care solution, healthcare staff were able to manage a significant amount of requests coming from the COVID-19 outbreak [30].

Cloud services have assisted H-IoT devices in the field that have limited resources like electricity and computational power. Moving energy and other resource-intensive jobs is now possible due to cloud computing technologies. Sensor nodes are primarily tasked with gathering COVID-19 data and delivering it to the cloud at the end of the day. As a result, these gadgets consume the majority of their energy during antenna broadcast and receive sessions. This, in combination with appropriate energy-saving algorithms, can help IoT devices last longer.

CONCLUSION

In order to avoid the transmission of dangerous diseases like COVID-19, social distance has generally been recognised an essential measure. We have offered a complete overview of how technology can facilitate, encourage, and enforce social distancing in this article. To begin, we gave an overview of social distancing, explained its role in the current COVID-19 pandemic, and presented a number of practical social distancing scenarios in which the technologies can be used. Then we discussed a variety of wireless technologies that can be used to encourage and facilitate social distance monitoring system. We gave an overview of each technology, looked at the state-of-the-art, and explored how it can be used in various social distance scenarios, as well as open issues in social distancing implementation and prospective solutions.

REFERENCES

1. M. Saraswath, K.V. Arya, Automated microscopic image analysis for leukocytes identification: a survey. *Micron*, Vol. 6(5), pp. 20–33, 2014.
2. Sun, C., and Zhai, Z., The efficacy of social distance and ventilation effectiveness in preventing COVID-19 transmission, *Journal of Sustain. Cities Soc.*, Vol. 6(2), pp. 10-23, 2020.
3. S. Bradley, Statistical Analysis of Human Overpopulation and its Impact on Sustainability, *Jo. of Medical Image Analysis*, Vol. 1(8), pp. 1-8, 2018.
4. G. Arora, G. Kroumpouzos, M. Kassir, M. Jafferany, T. Lotti, R. Sadoughifar, Z. Sitkowska, S. Grabbe, and M. Goldust, Solidarity and transparency against the COVID-19 pandemic, *Dermatologic therapy*, edth13359. Advance online publication. <https://doi.org/10.1111/dth.13359>, 2020.

5. L.S. Lau, G. Samari, R.T. Moresky, S.E. Casey, S.P. Kachur, L.F. Roberts, and M. Zard, COVID-19 in humanitarian settings and lessons learned from past epidemics”, Nat Med, Vol. 2(6), pp. 647–648. 2020.
6. J. Rocklov and H. Sjodin, High population densities catalyse the spread of COVID-19, Journal of Travel Medicine, Vol. 27(3), pp. 1-10, 2020.
7. M. Nicola, Z. Alsafi, C. Sohrabi, A. Kerwan, A. Al-Jabir, C. Iosifidis, M. Agha, and R. Agha, The socio-economic implications of the coronavirus and COVID-19 pandemic: a review, International Journal of Surgery, vol. 78, pp. 185–193, 2020.
8. R.R. Nadikattu, S.M. Mohammad, and P. Whig, “Novel Economical Social Distancing Smart Device for COVID-19”, International Journal of Electrical Engineering and Technology (IJEET), 2020.
9. Cunha, A.O., Loureiro, J.V., and Guimarães, R.L., Design and Development of a Wearable Device for Monitoring Social Distance using Received Signal Strength Indicator. In Proceedings of the Brazilian Symposium on Multimedia and the Web, São Luís, Brazil, pp. 57–60, 2020.
10. Bian, S., Zhou, B., Bello, H., and Lukowicz, P., A wearable magnetic field based proximity sensing system for monitoring COVID-19 social distancing. In Proceedings of the 2020 International Symposium on Wearable Computers, Cancún, Mexico, pp. 22–26, 2020.
11. Kobayashi, Y., Taniguchi, Y., Ochi, Y., and Iguchi, N., A System for Monitoring Social Distancing Using Microcomputer Modules on University Campuses. In Proceedings of the 2020 IEEE International Conference on Consumer Electronics-Asia (ICCE-Asia), Busan, Korea, pp. 1–4, 2020.
12. Neelavathy Pari, S., Vasu, B., and Geetha, A.V., Monitoring Social Distancing by Smart Phone App in the effect of COVID-19. Glob. J. Comput. Sci. Technol. Vol. 9, 946–953, 2020.
13. Jahmunah, V.; Sudarshan, V.K.; Oh, S.L.; Gururajan, R.; Gururajan, R.; Zhou, X.; Tao, X.; Faust, O.; Ciaccio, E.J.; Ng, K.H.; et al. Future IoT tools for COVID-19 contact tracing and prediction: A review of the state-of-the-science, Vol. 31, pp. 455–471, 2021.
14. Lubis, A.F. Basari Proximity-Based COVID-19 Contact Tracing System Devices for Locally Problems Solution. In Proceedings of the 2020 3rd International Seminar on Research of Information Technology and Intelligent Systems (ISRITI), Yogyakarta, Indonesia, pp. 365–370, 2020.
15. Alrashidi, M. Social Distancing in Indoor Spaces: An Intelligent Guide Based on the Internet of Things: COVID-19 as a Case Study, Jo. of Computers, Vol. 9, pp. 80-91, 2020.
16. Alhmiedat, T.; Salem, A.A. A Hybrid Range-free Localization Algorithm for ZigBeeWireless Sensor Networks. Int. Arab. J. Inf. Technol. 2017, 14, 647–653.
17. Sun, Y.; Zhang, X.; Wang, X.; Zhang, X. Device-free wireless localization using artificial neural networks in wireless sensor networks. Wirel. Commun. Mob. Comput. 2018, 2018. [CrossRef]
18. Ahmed, I.; Ahmad, M.; Rodrigues, J.J.; Jeon, G.; Din, S. A deep learning-based social distance monitoring framework for COVID-19. Sustain. Cities Soc. 2021, 65, 102571. [CrossRef] [PubMed]
19. Al-Khazraji, A.; Nehad, A.E. Smart Monitoring System for Physical Distancing. In Proceedings of the 2020 Second International Sustainability and Resilience Conference: Technology and Innovation in Building Designs (51154), Sakheer, Bahrain, 11–12 November 2020; pp. 1–3.
20. C. Yang and H. R. Shao, “WiFi-based indoor positioning,” IEEE Communications Magazine, vol. 53, no. 3, pp. 150-157, Mar. 2015.

21. R. J. Glass, L. M. Glass, W. E. Beyeler and H. J. Min, "Targeted social distancing designs for pandemic influenza," *Emerging infectious diseases*, Vol. 12(11), pp. 1671-1681, 2006.
22. S. Maharaj and A. Kleczkowski, "Controlling epidemic spread by social distancing: Do it well or not at all," *BMC Public Health*, Vol. 12(1), pp. 679-697, 2012.
23. N. Todtenberg and R. Kraemer, "A Survey on Bluetooth Multi-hop Networks," *Ad Hoc Networks*, vol. 93, pp. 101922-101949, Jun. 2019
24. Y. Zhuang, J. Yang, Y. Li, L. Qi, and N. El-Sheimy, "Smartphone-based Indoor Localization With Bluetooth Low Energy Beacons," *Sensors*, Vol. 16(5), pp. 596-616, 2016.
25. K. Mingis, "Tech pitches in to fight COVID-19 pandemic.," *Computer World*, May 5, 2020. Accessed: Apr. 20, 2020.
26. T. Romm, D. Harwell, E. Dwoskin and C. Timberg, "Apple, Google debut major effort to help people track if they've come in contact With Coronavirus." *Washington Post*, Apr. 11, 2020. Accessed: Apr. 20, 2020.
27. J. Wang, R. K. Dhanapal, P. Ramakrishnan, B. Balasingam, T. Souza and R. Maev, "Active RFID based indoor localization," in *IEEE International Conference on Information Fusion (FUSION)*, Ottawa, ON, Canada, Jul. 2-5, 2019.
28. P. Deepan and L.R. Sudha, "Deep Learning and its Applications related to IoT and Computer Vision", *Artificial Intelligence and IoT: Smart Convergence for Eco-friendly Topography*, Springer Nature, pp. 223-244, 2021.
29. Dr.B.Rajalingam, Dr.R.Santhoshkumar, Dr. G. Govinda Rajulu, Dr. R. Vasanthselvakumar, Dr. G. JawaharlalNehru, Dr. P. Santosh Kumar Patra, "Survey On Automatic Water Controlling System For Garden Using Internet Of Things (Iot)" *The George Washington International Law Review*, Vol.- 07 Issue -01 April-June 2021.
30. P. Dabove and V. D. Pietra, "Towards high accuracy GNSS real-time positioning with smartphones" *Advances in Space Research*, vol. 63(1), pp. 94-102, 2019.

EDUCATIONAL CONCEPTIONS AND THEIR IMPORTANCE IN THE EDUCATIONAL SYSTEM

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ANNOTATION

It was adopted by the decision of the Cabinet of Ministers with the aim of deeper integration of universal values and high spirituality into the minds of students of General secondary educational institutions taking into account the age and psychophysiological features, upbringing them in the spirit of patriotism and humanism, Organization of spiritual and educational work in general secondary educational institutions on a The introduction of such a science in educational institutions through the draft resolution "on the approval of the" continuous Spiritual Education Consortium " will certainly contribute to the education and training of students. In this article, opinions and comments will be made about the educational concept and their importance in the educational system.

Keywords: *educational counseling, educational institutions, training and education, new project, spirituality.*

Today's global processes, the development of Science and technology, the need for an innovative society create many opportunities for young people. They put forward vital requirements such as making quick decisions, forming innovative thinking, and being faithful to national and universal values along with increasing potential.

Therefore, the concept of "Education" in the Republic of Uzbekistan is aimed at solving the actual problems existing in the implementation of the state policy in the field of Education. The concession sets out the priority tasks, the main goals and directions aimed at bringing the work in the education of the younger generation to a new level.

In addition, the directions established in the consortium further serve the legal framework, economic opportunities and organizational goals in order to educate the country's youth spiritually and competently, to realize its achievements and potential, to attract them widely to the development of the state and society, and to support its initiatives at a sufficient level.

The period of pregnancy in the Republic of Uzbekistan, based on the principles of continuity and harmony in the educational process, has defined the main directions of spiritual upbringing of infants, children and schoolchildren and is important in the development of scientifically based indicators of the evaluation of spiritual education. In youth, important qualities such as loyalty to the motherland, entrepreneurship, willpower, ideological immunity, compassion, responsibility, tolerance, legal culture, innovative thinking, labor are gradually formed from infancy. It determines the forms of effective use of the advanced achievements of national and modern pedagogy in the education of students. It is regularly acquainted with effective pedagogical technologies, methods and forms of implementation tested in the world experience of continuous spiritual education, increasing the knowledge of the population on the upbringing of children, their pedagogical culture.

It is necessary to form a healthy worldview against intrusive ideas that spread through the mass media, including the global internet, obscene ills, leading young people astray. In the organization of continuous spiritual education, the cooperation of state organizations, civil society institutions, mass media and the private sector is effectively established. One of the priorities of the implementation of the concept of continuous

spiritual education is to increase the knowledge of the population on the upbringing of children, their pedagogical culture, to regularly familiarize citizens with effective methods and forms of implementation of continuous spiritual education. Education the purpose of the concept is to bring an adult of a high — quality, harmonious generation on the basis of the gradual formation of the necessary social skills and qualities for an independent life in the younger generation corresponding to the age.

In the general secondary education system, the concept of national independence, which is taught in general secondary schools with the aim of ensuring the age-appropriate spiritual development of students and the formation of active civil competences, defines the main directions of a single educational science that combines the disciplines “the idea of national independence: basic concepts and principles”, “the sense of decency”, “the idea To this end, the experiences of countries such as the people's Republic of China, Singapore, Japan, the Republic of Korea, Australia, Germany, Great Britain, France and the Russian Federation were studied, the curricula of the current disciplines were comprehensively analyzed comparatively.

The program, which was created on the basis of the concept, combines several optional training courses programs, such as the basics of the current healthy generation, Health, traffic rules, the basics of life safety, health classes, Legal Education, Environmental Education, Media culture, economics and tax lessons.

Today, in developed countries, a lot of practical work is being done on the application of innovation and technology in the creation of new models of working with young people. In a rapidly changing world, the formation of such qualities as responsibility, obligation, legal consciousness and legal culture, thoughtful worldview, soundness, enlightenment, religious and national tolerance, spiritual, civil, cultural, social are the main issues on the agenda.

CONCLUSION

The teaching of subjects in the category of “the idea of national independence: basic concepts and principles”, which has a direct impact on the education of young people, requires a new approach to the educational process. In particular, in the education of young people, it is possible to correctly assess the complex geopolitical and ideological processes taking place in the world, to make the right decision in the solution of social problems, to teach the formation of clear goals that are associated with finding their place in life, as a result of which it is possible to prevent the This, in its place, taking into account the fact that the education of young people, which is an important factor in the political, socio-economic and cultural and spiritual development of the Republic of Uzbekistan, has personally risen to the level of public policy on the initiative of the president of the Republic of Uzbekistan, demanded the need to improve principled approaches.

REFERENCES

1. [«Uzluksiz ma'naviy tarbiya konsepsiyasi» ishlab chiqildi \(kun.uz\)](#)
2. [Uzluksiz ma'naviy tarbiya konsepsiyasi tasdiqlandi – Gazeta.uz](#)
3. [Uzluksiz ma'naviy tarbiya konsepsiyasi tasdiqlandi - Daryo](#)
4. [422-coH 06.07.2020. Umumiy o'rta ta'lim muassasalarida “Tarbiya” fanini bosqichma-bosqich amaliyotga joriy etish chora-tadbirlari to'g'risida \(lex.uz\)](#)

TIPS TO IMPROVE THE EDUCATOR – TRAINEE RELATIONSHIP

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ANNOTATION

Social studies educators are just as likely to experience trainees motivational problems as are educators in other content areas. While it is not my purpose in this article to discuss the problems that lead to a lack of motivation, I would like to suggest a few of the reasons educators may have more trouble now than before in motivating trainees.

Keyword: *motivational problems, personal problems, effort, paradoxically.*

One source of motivational problems stems from the problems in Uzbek society that are found in too many Uzbek families. Poverty, divorce, one-parent families, and dysfunctional families sometimes create situations that cause young people to focus their time and attention on dealing with personal problems rather than classroom subjects. Another source of motivational problems may paradoxically stem from a success in the public school system. The effort to keep as many trainees as possible in school has been partially successful (Bracey 1991). This has resulted in trainees remaining in school who at one time would have either dropped out or have been removed. Although the goal of keeping as many trainees as possible in school is certainly worthy, it can lead to having more trainees in the classroom who lack a sense of direction and purpose, and hence a low level of motivation for learning.

Bearing in mind that the challenge of motivating trainees may be more difficult than it once was the literature from research and classroom practice related to motivation often mentions the quality of teacher-trainee relationships as a critical variable. High-quality relationships can motivate trainees to learn and engage in fewer disruptive behaviors (Hawley 1982; Morganett 1991; Spaulding 1992; Wlodkowski 1986). Here are ten practical and easy ways to improve teacher-trainee relationships.

1. *Get to know the trainees by name as quickly as possible.* Trainees will appreciate this. You may want to distribute an information sheet at the first class session. The sheet can ask trainees for their name, the name they prefer to be called by, where they live, interests or hobbies, a success experience, goals, places they have visited, part-time jobs held, etc. After you have trainees use the information from the sheet to introduce themselves to two or three other trainees whom they may not know in the class, you can have them come before the whole class and introduce themselves. As trainees do this, you will have a chance to focus on one trainee at a time. You may want to use imagery to help you remember each trainee by associating some particular image that is based on the trainee's name. You may also want to ask some follow-up questions. This will not only allow you to come to know more about each trainee but will also communicate your interest in them. If you are teaching a history class, you might ask trainees to list on the information sheet described above any famous historical places they have visited. Many trainees have visited historical places such as the homes of presidents (e.g., Mount Vernon or Monticello), cities (e.g., Washington, DC, or Boston), or places designed to re-create or maintain the past (e.g., Plymouth Colony in Massachusetts). This will provide you with the opportunity to let trainees in the class talk about these places if and when they come up as you teach your class. Also, trainees may have obtained things (e.g., pictures, videotapes, maps) that you can incorporate in your lesson to make it more interesting and real for the class. You might let the trainee who collected the item present that part of the lesson.

Regardless, it can help you and the trainees come to know and hopefully like each other better as you share interests and experiences.

2. *Get to know some personal things about each trainee.* Using the survey described previously is one way to accomplish this. Another activity is to take advantage of the time at the beginning and end of class, after tests, before holidays, or after holidays just to talk with and listen to trainees. Ask trainees about their weekends, goals and aspirations, and opinions about local, national, and world events. What you talk about is probably less important than the fact that you were interested enough to ask and listen. In your effort to improve classroom climate and build better teacher-trainee relationships, avoid focusing on answering factual questions or testing trainees' knowledge when discussing current events. Instead, ask them opinion questions. The goal is to get trainees to participate, to feel like they are valued members of the class and that their comments are valued-not to assign grades.

3. *Conduct a values analysis discussion about some current event or topic.* In this activity, it is important that certain rules be followed. Make sure that when anyone is speaking, everyone listens to the speaker. Trainees may ask questions to help clarify what a trainee is saying, but they cannot challenge or disagree with the speaker. Other trainees can respond with their opinions and support it, but they cannot directly disagree with each other. For example, in a history class we could ask trainees to read about and discuss the dropping of the atomic bombs in World War II. Ask trainees if they would have dropped the atomic bombs had they been President Truman. Have them explore why they would or would not have dropped the bombs. Or, in a government or sociology class you could have trainees examine the issue of the death penalty. Have trainees take a position on whether they favor or disapprove of the death penalty. Then have them explore the reasons for and against its use. In a psychology class, you could have trainees discuss the issue of using animals to conduct research. In getting trainees to listen to each other and you, you may need to discuss why it is important to listen carefully to others. Talk with them about respect and how they feel when others listen carefully to what they have to say. After all, as social studies educators, aren't teaching and understanding good interpersonal communication important goals for us?

4. *Provide positive comments when appropriate.* Sometimes we become so busy or frustrated by the problems that occur that we forget to notice and comments on the positive things trainees do. Educators can recognize effort, cooperative behavior, and helping behavior. Positive comments can also be made about things like a new hair style, a shirt, a pair of shoes, or a good voice. If you think the trainee might be embarrassed by public recognition from a teacher, then comment privately to the trainee. This can be done during study time. Or, you can write comments on papers you are returning to trainees such as homework assignments or tests.

5. *Be positive and enthusiastic when teaching.* Most trainees find it difficult to be motivated when the teacher is not. As we demonstrate our interest and joy in teaching, it shows that we enjoy being in the classroom and implies we enjoy being with the trainees. This should enhance teacher-trainee relationships.

6. *Show trainees that you are not only interested in them but also that you care about them.* How can you do this? Take the time to talk individually with trainees. You could do this by setting a goal for talking individually

with each trainee every week, or whatever is practical. You can ask about how they are doing with the content and skills in the course or you may prefer to make the conversation a more personal one. For example, you might ask trainees about their extracurricular activities, hobbies, or interests. Some educators make it a practice to greet trainees as they come into the classroom as yet another way to demonstrate their interest in their trainees. Another activity that some educators use to help trainees and to show them that they care is to have set times before, during, or after school to provide trainees with extra help on assignments or just to be there to talk with them. For example, you could be available to help trainees for thirty minutes before or after school.

7. *Avoid the use of threats and punishment.* If trainees do something that is disruptive, use a time-out procedure rather than punishment. After the time-out procedure has been used, be sure to sit down with trainees and talk with them. Practice active listening. That is, ask them how they feel about what occurred. Give them a chance to get out any frustrations and feelings. After they have had a chance to discuss their feelings, then you can talk about ways to avoid such an occurrence in the future. Make it clear to the trainee that it is the behavior and not the person that is unacceptable. In fact, make it a point to say or do something that will make the trainee feel valued.

8. *Do not play favorites.* Some trainees are easy to like, while others are not. Yet we need to be sure that some trainees do not get special privileges and others harsher treatment because of our feelings toward them. When we have tasks or responsibilities to be carried out, be sure to give all trainees an opportunity to participate. This will give us one more opportunity to strengthen our relationship with trainees by showing trust in them, as well as providing us with the opportunity to thank them for something they have done. If you have a particularly challenging trainee, you might try an activity suggested by Wlodkowski (Hawley 1982). Every day for two weeks, spend two minutes talking with the challenging trainee. During your conversation, say something positive about the trainee. Over the course of the two weeks, try to change the balance of the conversation so that the trainee does more of the talking.

9. *Create a supportive classroom environment.* Instead of having trainees compete with each other for grades, recognition, and/or success, have trainees work together cooperatively to carry out some task or project. In the evaluation process, base the grade on both individual and group achievement. Structure the evaluation process in such a way that individual improvement will help the group grade as well as the individual grade. This will hopefully get trainees to work together and help each other.

10. *Create an environment where questions and answers-even wrong answers-are encouraged and valued.* Trainees learn more and participate more when they feel comfortable asking and answering questions. But trainees will not ask or answer questions if they think they will be embarrassed. Encourage and recognize trainees when they ask and answer questions. When trainees tell you that they do not understand something, tell them that you appreciate their comment because it helps you to know what aspects of a lesson need additional coverage. In this article I have discussed only a few of the many activities that educators can use to strengthen teacher-trainee relationships. The ideas and activities listed in this article are not an exhaustive list, but rather a beginning. Use them to stimulate your thinking about what you can do to improve teacher-trainee relationships in your classroom. Research and practice indicate that trainees will become more motivated and that you will

have fewer disciplinary problems. Even more important, both you and your trainees may experience an increased sense of pleasure from the time spent in the classroom.

1. REFERENCES

- Bracey, G.W. "Why Can't They Be Like We Were?" *Phi Delta Kappan* 73 (October 1991): 104-117.
- Hawley, R.C. *Ten Steps For Motivating Reluctant Learners*. Amherst, MA: Education Research Associates, 1982.
- Morganett, L.L. "Good Teacher-Trainee Relationships: A Key Element in Classroom Motivation and Management." *Education* 112 (Winter 1991): 260-264.
- Spaulding, C.L. *Motivation in the Classroom*. New York: McGraw-Hill, 1992.
- Wlodkowski, R.J. *Motivation and Teaching: A Practical Guide*. Washington, DC: National Education Association, 1986.
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SYSTEM OF IMPROVING PSYCHOLOGICAL PREPARATION OF STUDENTS FOR PROFESSIONAL ACTIVITY

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ABSTRACT

The article is aimed at studying the system of improving the psychological readiness of students for professional activities. It also analyzes a number of scientific sources on general methodological and theoretical issues related to career choice, career guidance, understanding and definition of professional identity. The research focuses on the specific characteristics of individuals with motives for action in three areas. Self-direction.

Keywords--students, professional activity, profession, professional formation of students "self-orientation", "people-oriented", "activity-oriented", personal viability, professional viability.

I. INTRODUCTION

The attitude of university students to the profession, professional development and professional development is of great social and economic importance, which directly determines its scientific, spiritual, material potential, domestic and foreign policy. Also, this problem is one of the problems that need to be studied in a comprehensive and consistent manner, and based on this, appropriate measures and long-term plans should be developed. Because career choice, career guidance, professional diagnosis, the formation of young people as professionals, and professional development are always in the focus of government, but it is extremely important for an individual to think about his or her own future.

As we explore the question of interdependence in the professional formation of the individual, we must recognize that research has entered its critical phase today. This is because there are many studies that examine career choice, career guidance, career development, career management, and other issues of career development, and so on.

The analysis of scientific sources shows that a number of researches have been carried out on general methodological and theoretical problems related to career choice, career guidance, understanding and definition of professional identity, including: L.A. Aza, G.M. Belokrilova, A.E. Golomshtok, V.I. Zhukovskaya, E.A. Klimov, M.X. Titma, P.A. Shavir, M.G. Davletshin, N.Sh. Shodiev, B.R. Qodirov, E. G'. Gaziev et al [4].

A number of studies are devoted to the study of career choice, professional suitability and professional self-awareness, the psychological requirements of professional activity and the psychophysiological basis of individual activity, the formation of professional interests. In these directions M.H. Titma, E.A. Klimov, V.G. Maksimov, A.P. Chernyavchikaya, E.A. Golomshtok, K.M. An example is the research work of Gurievich, N.D. Levitov and others [1]. The problems of professional psychology have also been seriously studied by Uzbek scientists. In our country, teachers and

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psychologists have conducted a number of studies in this area, which include: vocational guidance of students (MG Davletshin, diagnostics of professional activity), (BR Kadyrov, KB Kadyrov, occupational psychology and

its ethnopsychological aspects) , EG Goziev, Development of professional interests in young people trained in technical professions [3]; formation of professional characteristics in students (A. Jabbarov) [4]; on the conditions of vocational guidance of students (P.T. Magzumov, vocational training of students (E.T. Choriev, the organization of vocational guidance of students (N. Shodiev) and others [1].

On the study of the philosophical and psychological nature of the profession, K.B. Kadyrov conducted scientific research. In his research, he has not limited himself to analyzing the issues of professional diagnostics, but has been able to briefly interpret the psychological nature of the professional works of our generation and ancestors. He conducted a phase of professional counseling, i.e. experiments in occupational diagnostics, and in his research he covered the process of professional activity in general psychological, differential psychological and psychodiagnostic [2].

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Having studied different stages of professional activity, AM Jabborov studied the formation of professionally important personal qualities of future cotton growers in student production brigades [4], RZ Gaynutdinov studied the professional development of Uzbek school teachers, the development of professional interests in young people trained in technical professions (E.N. Sattorov); B.N. Sirliiev and Sh.B. Saparov studied the professional formation of teachers and masters of vocational schools [1].

B.N. Sirliiev's research is aimed at studying the psychological aspects of professional development of masters of secondary special vocational schools, in which a psychological analysis of the relationship between the personal and professional characteristics of masters and their stages of professional development [4].

While focusing on the professional development of the individual, the author describes it as a dynamic and multi-level process. According to him, the process of maturation consists of four stages, the transition from one to the other takes place on the basis of the previous ones. The first stage is associated with the emergence of a professional intention, which arises and is formed under the influence of the initial professional orientation and general development in various spheres of labor. The psychological dimension of this stage is the choice of profession and specialty. The second is vocational education and training, that is, purposeful preparation for the chosen professional activity. It includes professional self-determination as a psychological criterion. This reflects the institution of professional development. The third stage is the introduction of a profession characterized by active acquisition of the profession and finding its place in the system of the production team.

The fourth stage is the full or partial manifestation of the individual in independent labor. The psychological indicator of this stage is the opportunity to master professional skills.

In research in Uzbek psychology, a problem closer to the one we are studying can be observed in the research of DN Arzikulov. The researcher touched upon the problem of professional development of future agronomists studying at the university. His research focuses on the psychological analysis of the development of personal and professional qualities in professional development, but the study does not reveal whether students

really fit into their chosen profession, what are the main barriers to their professional formation and factors influencing the formation of a specialist. Given the above, we will also focus on these issues in our research [1].

From the analysis of professional identification research, it can be concluded that each stage of professional activity should be viewed as a system. T.M.Buyakas, N.D.Levitov, O.N.Rodina in their research pay special attention to professional counseling, which is one of the stages of professional development, evaluate it as a guide

in the process of adaptation to a particular professional activity and explain the effectiveness of activities in relation to individual abilities [4].

In our research, we focused on identifying students' perceptions of career formation today, the factors that lead to career choice and what influences career choice, the levels of career motivations, personal and professional goals, interests, and professional decisions. However, so far scientific research has revealed that there are various reasons for choosing a profession. When analyzing adolescents' perceptions of professional identity, it was found that there was a shallowness in their perceptions of occupations. In addition, we need to keep in mind the factors of influence of the educational environment and others between the process of choosing a particular profession and the understanding of professional identity. The dialectical connection in these interaction processes alone is an indication of the complexity of this issue. For example, there are a number of stages in the organization of a single professional counseling:

- a) At the stage of vocational education, a person receives information about the organization of labor, recruitment requirements, occupation of various professions, stages of their training and duration of training, wages and prospects of the profession.
- b) at the diagnostic stage, the suitability of the person's interests, abilities, abilities and goals in relation to his chosen profession is studied;
- c) the student or person who chooses a profession at the formative stage is guided, deviations in career choice are prevented and corrections are made;
- (g) To determine the appropriateness of medical health to the profession and, at the psychological level, the appropriateness of personal qualities to the profession of their choice. P.A. According to Shavir, the definition of a person's professional identity requires the ability to meet future professional requirements, self-assessment of professional suitability, increase the level of willpower, love of work and life experience.

The fact that the study of the problem of the profession has a wide range of its own research subject can be seen in the research work carried out to date. It is noteworthy that these studies have been conducted for several years and the scale of the results obtained from them. Comparing them with the results of today's research will enrich our achievements in this area. However, the issue of the impact of students' professional perceptions on professional formation and adaptation to professional activity is one of the most pressing issues today. There are also a number of studies that focus on the psychological aspects of a person's professional development [20]. There are various approaches, scientific conclusions and special methodologies in the study of professional

activity as a subject of psychological and pedagogical research.

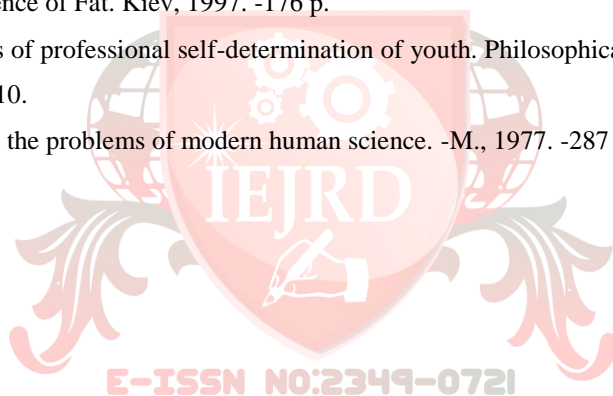
RECOMMENDATIONS

To prevent shortcomings and deficiencies in the process of personal and professional formation of students in higher education institutions, to organize courses on professional training in psychological service centers and to

ensure that leading specialists work in them. Introduction of a perfect "Professional Perspective Map of Personality" of professional formation, which takes into account any changes in professional activity, the purpose of which is of general importance, serves to the corre

REFERENCES

1. Arzikulov D.N. Psychological peculiarities of professional maturity: Avtoref.psix.fan.nomz.dis.T.2002.- 137.
2. Asamova RZ Motivation to choose a profession and its dynamics // Diss. psychol. fanl.nomzod.- Toshkent, 2002.-138 p.
3. Gaziev EG Psychological foundations of the development of self-learning by schoolchildren and students. Abstract. Dis .. Doct. ps. sciences. M.: 1992.- 38 p.
4. Zhabbarov A.M. Psychological foundations of the formation of professionally significant personality traits of the future cotton grower in student production teams: Abstract. dis ... cand. psychol. sciences. – Kiev, 1999.-27 p.
5. Abramova G.S. Practical psychology. Textbook for university students. - Ed., 6th., Revised. and additional ..- M.: Academic Project, 2001.- 480 p.
6. Adler A. The Science of Fat. Kiev, 1997. -176 p.
7. Aza L.A. Features of professional self-determination of youth. Philosophical and sociological thought.- 1989.-No. 6.-p 3-10.
8. Ananyev B.G. On the problems of modern human science. -M., 1977. -287 p.



THE IMPACT OF MODERN INFORMATION PSYCHOLOGICAL THREATS ON YOUTH WORLDVIEWS

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Annotation

In today's world, where the world has become a single information space, the struggle for ideas is intensifying in various forms. At the same time, in the words of the Head of State, the struggle against anti-idea, anti-ignorance and enlightenment is becoming their main motto in the activities of the media. It is known that every newspaper, magazine, radio, television, the Internet has the power to have different levels of psychological impact on the public consciousness. For example, in newspapers, opinions are conveyed in writing, and when the time comes, through pictures. Information provided in the press can also be read over and over again and used as a source. This is one of the advantages of print media. In this article, Modern Information discusses the impact of psychological threats on young people's worldview.

Keywords: *information age, technology, psychological threat, modern information, youth worldview.*

Today, the information services of the republican television and radio company, a number of publications and organizations also bring their information to the attention of the world community through their respective websites. So, we have the right to say that the Uzbek media now has a worthy place in the world information space. In addition to obtaining the necessary information in this space, we also see the damage of information attacks, moral threats. It should be clear to all of us that in the so-called "information age" of the XXI century, no state or society can live within an iron wall. At the same time, it is not right to pretend that this is the case, and in response to such threats, we must also take the necessary measures, - said the head of state. - We know that our people are kind, simple and trustworthy. He looks with confidence at what has been published in the press, on television and on the radio. The information centers that are working against us from abroad will try to take advantage of this. "

So, we will try to find a brief answer to the question of how those who work against us use the media. We will take a broader approach to the subject in this regard. In other words, in addition to committing "information attacks" from abroad, it is appropriate to openly answer the question of whether we do not make mistakes, and whether our students are not morally harmed. As people look more confidently at the press, it means that spelling mistakes, obscene sentences, irrational ideas, wrong terms and phrases in the newspaper will make the reader illiterate and distracted. It is unfortunate that such shortcomings have been allowed in some publications in recent times.

It should be noted that the information-psychological impact is mainly carried out through the media, in particular, radio broadcasts. Some people with destructive ideas try to use this power of the media to their advantage.

Disadvantages of the Internet: anyone can enter the virtual space without hindrance with any information. In the first place, the number of intruders who take advantage of the lack of control will increase. As a result, the Internet can become a "space" that promotes vandalism, subversive ideas, pornography, and other vices. As a media outlet, there are many pros and cons of the internet. First of all, it is cheap to prepare and disseminate information, and it can easily cross the state border. It is very difficult to prevent information attacks on the

Internet4. It is becoming common for some people to use it to pursue their own ends through the Internet. They are trying to pose a spiritual threat in every way. So what is a spiritual threat? A brief answer to the question of why they are being threatened can be found in the book "High spirituality is an invincible force." "Spiritual threats are, first of all, ideological, ideological and informational attacks aimed at destroying the spiritual world of every person, regardless of language, religion or belief," he wrote. - If we look at the issue from a practical point of view, any attack on our spirituality is a unique and appropriate feature that makes our nation a nation, passed down from ancestors to generations for centuries, millennia, a sense of national pride, national progress. It represents the terrible dangers that call upon us to get rid of all the complications and vices of this path and to strike a great blow to our noble goals, such as building a free and prosperous life. "

It should be noted that today some media outlets are becoming a tool for information and psychological warfare.

In addition to the task of collecting and disseminating information, the modern media is also responsible for protecting the people of the country, especially the younger generation, from various information attacks and ideological threats. have sufficient skills and abilities about the capabilities of the media, methods of collecting information and disseminating it to the public. The secrets of this industry are better known to them than anyone else. But does the work being done meet today's requirements? " After all, today ideological opponents are trying to poison our spirituality, especially the minds of our youth, with "information attacks." They are increasingly threatening and influencing under the guise of "popular culture." It is impossible to look at it indifferently.

An information war waged for selfish ends is waged with careful thought. They use psychological, electronic and other methods in this regard. It doesn't take a lot of work to wage an information war, there's no need for expensive weapons. In this war, the borders of the state will not matter. Information tools have broad and narrow meanings. In a broad sense, they are actions that encourage the opponent to think in the right direction, are able to change his point of view, and are carried out with the help of the necessary information. In the narrow sense - technical methods and technologies that provide control over the opponent's information resources and damage its telecommunications systems. Hence, information weapons are special devices and tools that affect a competitor's information and management systems. Naturally, the possibilities for the use of such weapons by countries with advanced information technologies are very wide.

REFERENCES

1. Lyddon, W. J., & Adamson, L. A. (1992). Worldview and counseling preference: An analogue study. *Journal of Counseling and Development*, 71, 41-47.p
2. Lyubomirsky, S. (2001). Why are some people happier than others? The role of cognitive and motivational processes in well-being. *American Psychologist*, 56, 239-249.p
3. Markova, I. (2000). The individual and society in psychological theory. *Theory and Psychology*, 10, 107-116.p
4. Is Personal Life Purpose Replacing Shared Worldview as Youths Increasingly Individualize? Implications for Educators.

https://www.researchgate.net/publication/333518529_Is_Personal_Life_Purpose_Replacing_Shared_Worldview_as_Youths_Increasingly_Individuate_Implications_for_Educators

5. The Psychology of Worldviews. https://www.researchgate.net/publication/232554126_The_Psychology_of_Worldviews



SOCIAL PSYCHOLOGICAL CRITERIA FOR EARLY DETECTION OF PROFESSIONAL MOTIVATION IN THE IMPLEMENTATION OF EDUCATIONAL REFORMS (ON THE EXAMPLE OF SMALL SCHOOL CHILDREN)

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ANNOTATION

There are different methods of use for motivation. This serves as the leading force for all the actions of a person, but understanding how it works and that can affect it can be important in several ways. Motivation is a process that initiates, manages and maintains purposeful behavior. Whether it's taking a glass of water to reduce thirst, or reading a book to gain knowledge, it's something that will bring out your effort. In this article, the social psychological criteria for the early determination of professional motivation in the implementation of educational reforms (on the example of junior school children) are analyzed.

Keywords: *social psychological, professional motivation, determination, knowledge, educational reforms, cognitive forces, junior school children.*

Motivation includes the biological, emotional, social and cognitive forces that drive behavior. In everyday use, the term "motivation" is often used to describe why a person does any work. This is the driving force of human action. Motivation does not only mean that the actions, it also includes that manages and supports the actions that are directed towards this goal (although such motivations can rarely be directly observed). As a result, we often have to draw conclusions about why people do what they do based on observable behaviors.

Types of motivation. Different motivation is often described as external or internal:

- External motivation it is the result of an individual coming from outside and often includes rewards such as prizes, money, social recognition or praise.
- Internal motivations these are the motivations that come from within the individual, for example, to fulfill a complex crossword for personal satisfaction in solving a problem.

There are three main components of motivation: activity, perseverance and intensiveness. Activation involves making a decision to start an action, such as enrolling in a psychology class. Persistence is the pursuit of the goal, despite the presence of obstacles. An example of endurance may be attending more psychology courses to gain a scientific degree, but this requires a large amount of time, effort and funds. Intensity can be seen from the intensity and strength aimed at achieving the goal. For example, one student can go ashore without much effort, while another is constantly studying, taking part in discussions and taking advantage of extracurricular research opportunities. The first student lacks intensity, and the second one seeks his educational goals with greater intensity.

The level of each of these components of motivation can influence whether you achieve your goal or not. For example, strong activation means that there is a high probability that you will start pursuing a goal. Persistence and intensiveness determine whether you will continue to strive towards this goal and how much effort you will be able to achieve it.

All students will notice a change in their motivation and willpower. Sometimes it happens that you are fired and there is a high motivation to achieve your goals, at other times you may not even know what you want

or what you want or how you will achieve it yourself. The instinct theory of motivation predicts that behavior is stimulated by instincts that are persistent and innate patterns of behavior. Five psychologists, such as William James, Sigmund Freud and William McDugall, offered a number of basic human instincts that promote behavior. Such instincts can include biological instincts, such as fear, purity and love, which are important for the survival of the organism.

The adverse health effects of illicit drug use can be very significant, although this varies greatly depending on the specific drug, the combination of drugs consumed, the methods of intake, amount, and frequency of use. Among those who inject drugs, mortality is high due to overdose and associated medical complications since many drug users either share needles or use contaminated materials.

It suggests that it aims to engage in conduct that help students maintain their optimum level of arousal by encouraging them in engaging in education. A person with low arousal needs can engage in relaxing activities, such as reading a book, while those with high interests can be motivated by exciting, exciting behaviors such as motorcycle racing.

The purpose of this study was to evaluate the ability of a universal screening measure to identify students who might otherwise go undetected through a traditional identification paradigm (teacher referral for special education, child study team, or other school-based service provisions). Utilizing data from a cohort of third- and fourth-grade students, the differences between students referred and not referred for evaluation or intervention based on the different referral systems was examined. The ever-increasing body of evaluation literature shows links between social-emotional learning programs and improved outcomes in a wide range of areas that include teacher social and emotional competence, improved student behavior, and increases in student academic achievement.

CONCLUSION

The understanding of motivation to students is important in many areas of life, for example, from parents to the place of work. You may want to set the right reward systems to set your best goals and encourage others as well as increase your motivation. Motivational cognition and their implication are used in other aspects of marketing and industrial psychology. There are many legends here and everyone can benefit from knowing what works and what does not.

REFERENCES

1. Bradley, R., Doolittle, J., & Bartolotta, R. (2008). Building on the data and adding to the discussion: The experiences and outcomes of students with emotional disturbance. *Journal of Behavioral Education*, 17, 4-23.
2. Kratochwill, T.R., Albers, C.A., & Shernoff, E. (2004). School-based interventions. *Child and Adolescent Psychiatric Clinicals of North America*, 13, 885-903.
3. Walker, H.M., & Shinn, M.R. (2002). Structuring school-based interventions to achieve integrated primary, secondary, and tertiary prevention goals for safe and effective schools. *National Association of School Psychologists*.
4. Wigelsworth, M., Humphrey, N., & Lendrum, A. (2012). A national evaluation of the impact of the secondary social and emotional aspects of learning (SEAL) programme. *Educational Psychology*, 32(2), 213-238

ELIMINATION OF BLACK MELL DISEASE IN SURKHANDARYA CLIMATE AND MEASURES

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ANNOTATION

The *Ustilaginales* order of the fungal world or black moth fungi, is important in phytopathology and causes many diseases in plants. In the dicarotic phase of the developmental cycle in nature, these fungi are obligate parasites of flowering higher plants. Blackhead infections are often local, but can be systemic. Manifestations and effects of species that pose a serious threat to agricultural crops. Development cycles of fungi that cause hard and powdery mildew in wheat and agro-technical measures in control.

Keywords: *Karakuya: powdery and hard karakuya cereals, spores-chladamispora, vegetation, seeds, fungicides.*

It has a significant impact on productivity, especially in tropical and subtropical countries. The so-called black moth disease is the formation of powdery spores (teliospores) in plant tissues, resembling the remains of a fire. Various parts of plants-the stems of leaves, sometimes even the roots-are damaged, but blackberries are usually affected by the reproductive organs (flowers, spikes) of many plant species. Some are perennial (chronic) infections in some host plants, wintering in pathogenic plant tissues and in the spring the newly grown plant is already damaged. Plant such as wheat, barley, millet blackberries (*Tilletia ustilages*), corn bubbles (*Ustilago maydis*) and oat powdery mildew (*U.avenae*) are diseased, yields are reduced and product quality deteriorates sharply. The prevalence of this disease, which has a serious impact on yields, under moderate conditions, requires the introduction of important agro-technical measures to combat the proliferation of chladospores of the fungus in soil structures over the years. An important feature of an infected plant is that it darkens as a result of damage by fungal spores instead of grain after the cluster has matured. These pollens are the perennial chladaminospores of the black moth, which are spread by infected seeds. Diseases are divided into 4 groups according to their origin:

5. Infection of the seed as a result of infection by fungal spores. The surface of such seeds is damaged by chlamydospores of the black moth fungus during seed collection, cleaning, storage and transportation. These factors play a key role in the overall damage to wheat.
6. These factors play a key role in the overall damage to wheat. In powdery mildew of wheat and barley, the colorless mycelium of the fungus is infected inside the seed by chlamydospores that fall during the flowering period of the plant.
7. During the growing season (from sowing to ripening), bubble black moth disease of corn and millet is caused by wind-borne spores.
8. The source of infection in wheatgrass is chlamydospores, which remain in the soil 4 years and infect grasses during seed germination.

In general, black moth disease is divided into severe black moth and powdery mildew according to the origin and manifestation, internal and external symptoms. In severe black moth disease, the epidermis of the seed is damaged and the seed coat remains intact. The inside of the seed coat is filled with chlamydial spores of the fungus. The disease completely contagious. Rapture of the seed coat causes

wind damage to all field plants. Such factors can lead to complete loss of yield. The caustative agent of powdery mildew is *Ustilago tritici* Jens a type of fungus that produces mycelium and spores throughout its life and is manifested during the formation and flowering by the process of wind-infected plants attaching to the flowers of healthy ones and entering the seed pods to the nodes. The appearance of wheat grains is not different from that of healthy grains, the seed coat contains mycelia hyphae of dust mites. The temperature should be 20-25 degrees and the humidity should be above 50%. Under such conditions, the spores spread rapidly.

From an economic point of view, this is a very important procedure, as blackberries cause great damage to valuable agricultural crops and ornamental crops. Many common species of blackberries cause the loss of much of the grain crop that provides food for most people in the world. In a field heavily infested with hard blackberries the dust of teliospores rising into the air while harvesting with a combine can explode under the influence of sparks emitted by agricultural machinery. In addition, teliospores are allergenic and their powders can cause allergies in workers. The duration of cold days, the availability of effective temperatures, the presence of artificial irrigation in dry and hot summers and in many cases the presence of sufficient soil moisture conditions lead to the spread of black moth disease. Complex measures are important in the fight against it. Seeds should be obtained from a healthy plant and stored in good conditions for normal growth of crops and increase their resistance. Regular monitoring of the level of disease in the fields, sowing the seeds in soil-friendly environmental conditions will reduce the damage. It is important to follow the data collected as a result of regular inspections. As a result of the control it is strictly forbidden to harvest seeds from more than 2-5% of diseased fields. It is also important to pay attention to the distance between crops and crop rotation. Because the next crop should not be involved in the development of the fungus. Proper fertilization and microorganisms also need to be managed properly. Black moth seeds are easily controlled with medicinal fungicides. Some fungicides are also effective against smallpox, but due to the availability of highly resistant varieties, the chemical method against this pathogen is not widely used in the US. Timely adherence to all agrotechnical measures and strengthening control over them is an important and urgent task in the elimination of black moth.

LITERATURE

7. A.Sh.Sheraliyev, U.H.Rahimov "O'simliklar fitopatologiyasi". Toshkent-2014.
8. Z.Umarov, H.N.Atabayeva "Modern technology of cultivation of field crops". Toshkent-2003.
9. B.A.Sulaymonov, B.M.Xoliqov "Mo'tadil iqlim sharoitida yuqori hosil olishda agrotexnik tadbirlar bo'yicha tavsiyalar". Toshkent-2016.
10. Sh.Beshimova, L.Salimova. "O'simlik mahsulotlari yetishtirish texnologiyasi va ekologiya". "O'zbekiston" nashriyoti. Toshkent-1994.
11. H.Ch.Bo'riyev, Z.A.Abdukarimov, S.Y.Islomov "Seleksiya, urug'chilik va urug'shunolik". Toshkent-2010.
12. T.Uraimov, E.Ochilov, Z.Jumaboyev. "Dehqonchilik va ilmiy izlanish asoslari". Toshkent "Navro'z nashriyoti" 2014.

Scope

Agricultural science	Veterinary science	Astronomy
Biological Sciences	Medical science	Architecture
Pharmaceutical science	Chemical Sciences	Psychological science
Technical science	Physical and Mathematical Sciences	Pedagogical science
Geographical science	Geological and Mineralogical Sciences	Journalism
Social Sciences	Multidisciplinary	Legal science
Art criticism	Historical science	Economics
Literature	Political science	Philosophical
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