Андреянова Е.М., Фуфаева И.П.
Научный руководитель: старший преподаватель М.В. Залугина
Муромский институт (филиал) федерального государственного образовательного учреждения высшего образования «Владимирский государственный университет имени Александра Григорьевича и Николая Григорьевича Столетовых»
602264, г. Муром, Владимирская обл., ул. Орловская, 23
E-mail: irina515fufaeva@mail.ru

Mobbing am Arbeitsplatz

Mobbing, Straining und andere Konflikte stellen ein gesamtgesellschaftliches Thema unserer modernen Arbeitswelt dar. Heutzutage sind viele Mitarbeiter von Mobbing betroffen. Es trifft sowohl Frauen als auch Männer. Besonders oft werden Kolleginnen und Kollegen gemobbt, die noch nicht lange an ihrem derzeitigen Arbeitsplatz arbeiten. Das Mobbing kann in der Arbeitsgruppe eine Atmosphäre der Angst erzeugt: wer als Nächster als Zielscheibe dient? Misstrauen ruiniert die Arbeitsfreude und Kreativität aller. Die daraus entstehenden Produktivitätsverluste zahlt der Arbeitgeber.

Der Begriff Mobbing kommt aus dem Englischen und bedeutet «jemanden angreifen, attackieren». Er wurde von dem Forscher Konrad Lorenz für aggressives Tierverhalten benutzt. Mobbing – Psychoterror am Arbeitsplatz veröffentlichte und den bösartigen Angriffen auf Kollegen am Arbeitsplatz einen Namen gab. Seitdem ist Mobbing international umfangreich erforscht. Das ist mehr als schlechtes Betriebsklima. Das ist massiver Psychoterror, den kleine Gruppen von Kollegen gegen einzelne Mitarbeiter ausüben [1].

Harald Ege (Arbeitspsychologe und Mobbingexperte) lässt sich sieben Kriterien von Mobbing unterscheiden.

1. Der erste von Harald Eges Parametern, um die verschiedenen Formen beruflicher Schikane voneinander zu unterscheiden, ist der **Ort der Handlung** Bei Straining und Mobbing ist das immer der Arbeitsplatz, nur bei Stalking kann auch die Privatwohnung betroffen sein.
2. Die **Häufigkeit der Tat** unterscheidet sich: Mobber agieren häufig, manchmal täglich. Strainer handeln oft nur einmal mit einer durchschlagenden Maßnahme, deren Folgen den Getroffenen jedoch langfristig schädigen.
3. Das Dritte ist die **Dauer des Konflikts.** Straining wie Mobbing beruhen auf Arbeitskonflikten, deren Folgen lange anhalten, mindestens ein halbes Jahr. Das unterscheidet sie von akuten Konflikten wie einem Streit oder einer als verletzend empfundenen Kritik.
4. Das vierte Kriterium betrifft die **Art der Handlung.** Ein deutliches Anzeichen für Straining ist die Änderung von Arbeitsaufgaben. Beim Mobbing hingegen sind die Attacken meist lauter, direkter und vielseitiger.
5. Fünftens befinden sich die Opfer bei Straining wie Mobbing immer in einer **Position der Unterlegenheit.** Anders als bei Konflikten zwischen gleichgestellten Konkurrenten sind die Opfer nie mit dem Angreifer auf Augenhöhe, umso weniger, je weiter der Konflikt fortschreitet.
6. Im sechsten Parameter werden **Phasen** benannt: Beim Mobbing eskaliert der Konflikt von Phase zu Phase immer starker. Diese Dynamik ist bei Straining weit weniger ausgeprägt – aber ebenso zermürbend.
7. Das letzte Kriterium ist die **Absicht des Aggressors.** Strainer wie Mobber verfolgen ein langfristiges strategisches Ziel: Beide wollen das Opfer loswerden. Mobber wollen darüber hinaus aber auch kurzfristig schikanieren. Sie kritisieren, unterstellen, verleumden, um die Position des Opfers sukzessive zu schwachen und auszuhöhlen.

Der Schluss liegt nahe, dass Menschen, die stark mit ihrer Arbeit identifiziert sind oder großen Wert auf Ansehen und soziale Akzeptanz legen, ein erhöhtes Risiko tragen, durch Ungerechtigkeitserfahrungen wie Straining einen psychischen Knacks zu erleiden. Wie stark jemand reagiere, hänge von der subjektiven Bedeutung der Ungerechtigkeit ab, sagt Linden, und davon, wie hoch die Gerechtigkeitserwartungen einer Person sind. Auch Menschen mit Persönlichkeitsstörungen, die in ihrem Umfeld häufig Abwehrreaktionen hervorriefen, hätten ein erhöhtes Risiko, an einer Verbitterungsstörung zu erkranken [2].

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Безроднов М.М.
Научный руководитель: старший преподаватель С.О. Левина
Муромский институт (филиал) федерального государственного образовательного учреждения высшего образования «Владимирский государственный университет имени Александра Григорьевича и Николая Григорьевича Столетовых»
602264, г. Муром, Владимирская обл., ул. Орловская, 23
E-mail: maxim.bezrodnov@yandex.ru

Ecological consequences of modern wars

The modern wars cannot do without the weapon striking the larger areas. Negative action of such weapon extends not only to people, but also to environment. However not only use of weapon can lead to serious negative consequences of ecology. Excess operation of natural resources, the mined sites, oddments of chemicals, combustion gases, high-toxic fuel, funnel from explosions of bombs, use of toxic agents, ecocide, use of weapons of mass destruction, destruction of hydraulic engineering constructions etc.

The consequences of use of explosive substances, besides explosion – formation of clouds with the maintenance of various chemical combinations. It is known that at explosion of 1 kg of explosive 0,7–0,9 cubic meters of gases are formed. Therefore, at explosion of 10 tons the cloud of 7-9 thousand cubic meters containing white damps, nitrogen oxides, and also dust, soot and compounds of metals will turn out. It can be concluded that the main ecological impact of explosions is chemical pollution of air and soil. One more negative effect is the formation of funnels. They cause erosion and formation of swamps which prevent agricultural activity and become sources of infectious diseases.

Excess operation of natural resources, first of all gas, oil and coal, can become the reason that many territories will lose the significance.

Mined sites, technique oddments, chemicals, combustion gases and other consequences are suitable for the term "War Echo". They strongly reduce territories which are possible to call the habitat of the person or animals. Unexploded shells and mined territories lead to human losses even after peace-making. For neutralization of all ammunition is required decades.

Destruction of hydraulic engineering constructions, causes flooding of large areas that can lead to people death, destruction of settlements and the long-lived termination of navigation.

Use of chemical and bacteriological weapon, is dangerous to ecology and can do harm or completely destroy anything in this area. Destruction of any species of animals in the field of influence of weapon will completely change the image of the natural world in this area.

War usually had no causing damage to environment as the immediate purpose. It is only a consequence of military operations. This side of wars usually escaped from researchers' attention, and only in recent years the ecological damage from these wars has become the subject of the serious analysis.

At the beginning of a civilization wars did not cause to the Earth such a loss. With the development of humanity and improvement of weapons the decreasing harm was done to our planet. By the 21st century the ecological situation became aggravated so that there is a danger of global ecological crisis. Dangerous situation which developed in the World demands from people to think over the actions and the prospects of furher development. General disarmament and destruction of all types of weapon of mass defeat, first of all atomic, chemical and biological can be the single actual alternative to a global disaster.

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Боликова В.В.
преподаватель В.В.Воронова
ГБПОУ ВО "Муромский медицинский колледж"
602256 Муром, Владимирская обл., Ковровская ул., 18,
E-mail: mur_col@mail.ru

Water as the compound essential to the human body

There are some elements and compounds essential for life processes. They are oxygen, carbon, hydrogen, macronutrients, micronutrients, water, proteins, fats, carbohydrates and others.

The purpose of the report is to consider the role of water to human health, to study the risks of inadequate water intake and develop recommendations for a patient.

It is known that water molecule is composed of one oxygen and two hydrogen atoms bonded together. It is a simple form without what life could not exist. The human body is proved to be 69% water. The brain is 85% water, blood contains 83% water and bones is made up of 35% water.

Water is known to involve in all human body processes. Its remarkable properties are the following:

- It is an excellent solvent transporting nutrients around the body and waste products from the body's metabolic processes;
- Water maintains every body cell;
- The compound takes part in many chemical reactions, such as breaking down carbohydrates and proteins during the digestion process;
- It acts as a lubricant reducing friction between the joints;
- Water maintains the body's temperature essential for health. It acts as a temperature regulator through sweating;
- It is an internal organ protector preventing the transmission of shock from the outside;
- It makes the bloodstream liquid enough to flow through blood vessels;
- Water moistens mucous membranes and hydrates the skin;
- It maintains a healthy weight;
- Water decreases the hyaluronic acid molecules;
- The considered compound reduces the risk of diseases (e.g.cystitis by clearing up the bladder of bacteria).

Water is lost by the body during everyday functioning such as perspiration, urination, breathing. It means that water loss must to be replaced. Scientists recommend to drink about 3 liters a day for men and 2.2 liters for women. But this amount may vary from person to person. It depends on different factors including the man's activity, sweating. health problems, individual properties, age and the climate.

There are some risks of inadequate water intake. They are urinary tract infections, kidney stones. dehydration, blood pressure, digestive problems and constipation, lowering physical and mental performance, fluid retention.

We have carried out the study among the students of our group to measure the intake of drinking water and have analyzed the results. Many of them don't drink enough water. So we have developed some practical recommendations. They can help a person to be healthier:

- Start the morning with a glass of warm water.
- Drink 1-2 glasses of water 30 minutes before meals.
- Add a slice of lemon or lime juice to a glass of water.
- Don't consume lemon with very hot water.
- Drink water before going to bed. It will make you sleep well.
- Eat foods having higher water content (cucumbers, tomatoes, watermelons, oranges).
- Keep a water bottle handy.
- Choose low-sodium mineral water.
- Remember that your drinking water should always be free of contaminants.

Thus, the human body depends on water for its functioning. So you should remember that proper hydration is a key to good health and wellness.

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Дейко В.С.
Научный руководитель: ст. преподаватель Фролова О.А.
Муромский институт (филиал) федерального государственного образовательного учреждения высшего образования «Владимирский государственный университет имени Александра Григорьевича и Николая Григорьевича Столетовых»
602264, г. Муром, Владимирская обл., ул. Орловская, 23
E-mail: deather52rus@yandex.ru

Modern Guitar Processors

In the 1960s, many artists start thinking how to make the sound of their guitar brighter, more beautiful, richer, louder. It was the time when the first effect pedals appeared. An effect pedal is a small device which add some “coloring” of the sound (some effect to a clean audio signal). The first guitar effect was distortion – sound effect which alters the instrument sound by clipping the signal, adding sustain and harmonic and inharmonic overtones. Later, many other effects appeared. Then, different pedals were joined into a circuit, allowing you to create a unique beautiful sound. For convenience, a circuit of effect pedals were joined into a pedalboard (it means that they were fixed on a hard surface and commutated). This was done primarily to save time, to avoid assembling and disassembling the whole circuit of pedals. However, the experience of many musicians showed that many separate device effects are not always convenient to use. Their serial connection requires a plurality of wires, respectively, increases the level of noise and interference, etc. Manufacturers combined multiple effects in one body, so there were guitar effect processors.

Guitar effect processor is a digital device which is the emulator (simulator) of the processes occurring in the guitar tract of different devices: effect pedals, different preamps, amps, combos, cabinets and rack devices. The main principle of its work is the following: sound through the ADC comes to DSP (digital signal processor), then it is processed according to a given algorithm and is converted into sound through the DAC.

Zoom company is considered to be a pioneer in the creation of guitar processors. The first “floor” guitar processor was Zoom 505, and the first pocket g.p. was Zoom 9002.

The first processors had a small number of effects, they cost high but had poor functionality and poor quality of the emulated effects.

All guitar processors can be divided into two major categories:

a) floor / rack versions;

b) software version.

The processor is a digital device, which size and functionality varies from conventional transistor-based pedal to a huge pedalboard. Rack versions of the processors are used to work in studios, as they have more possibilities for adjusting sound settings than floor options. Processors in this category are available in various price versions: from budget ones to play at home to the record studio equipment. The advantages of this variant of guitar processor are:

- compact size;
- easiness in transporting;
- acceptable sound quality;
- low sound latency.

The only disadvantage is their high price.

The second category is also known as virtual guitar processors. This is a program-emulator (simulator) of the processes occurring in the guitar tract of various devices using special software algorithms to simulate the physical devices of the electronic signal processing of electric guitar. There are several options for software modeling: it is a VST plug-in or Standalone version. The advantages of this variant of guitar processor are:

- low price;
- low-mid sound latency;
- compact size.

The disadvantages are:

- not very good sound quality;
- dependence on the "stuffing" of the guitar and a good shield.

To sum it up, we can understand that multi-effect processors play a very important role in the creation of guitar sound, as well as help the music industry develop.

Ершов М.В.
Научный руководитель – преподаватель Мацкевич К.О.
Муромский институт (филиал) федерального государственного образовательного учреждения высшего образования «Владимирский государственный университет имени Александра Григорьевича и Николая Григорьевича Столетовых»
602264, г. Муром, Владимирская обл., ул. Орловская, 23
E-mail: maksimka.ershov.98@mail.ru

The Role of the computer in our life.

Currently, computerization is firmly established in our life. It has penetrated into all spheres of the economy and the national economy: industry, management, banking, trade. The higher levels of education are also closely connected with the use of the computer.

The computers appeared in our world many years ago, but only recently they have been used intensively in many fields of human life. Ten years ago it was so rare to see any personal computer — they were, but they were very expensive, and not even each firm may have them in their offices. Now in every third house there is a computer that is already deeply involved in the life of the inhabitants of the house.

Modern computers represent one of the most significant achievements of the human thought whose influence on the development of scientific and technological progress cannot be overestimated. The field of use of computers is continuously expanding. This contributes greatly to the spread of personal computers, especially microcomputers. During the last 50 years, digital computers have evolved from “magic”, but they are expensive, unique and superheated piles of vacuum tubes, wires and magnetic cores in a small size machine - a personal computer - consists of millions of tiny semiconductor devices that are packaged in small plastic boxes.

The computers are used everywhere. They control the operation of cash registers, monitor the operation of automotive ignition systems, conduct family budget, or just used as entertainment complex. But this is only a small part of the capabilities of modern computers. Moreover, the rapid progress of semiconductor microelectronics, which is a database of computers, suggests that the current level of computers and their areas of application is only a shadow of what will come in the future.

Computers are beginning to affect the lives of every person. If you get sick, and if you are referred to hospital, once there, you will find yourself in a world where you life depends on the work of the computer. Gradually learning about computers trying to introduce in the school curricula as a compulsory subject, so that the child could already from quite an early age to know the structure and capabilities of computers. And at schools for many years, computers were used for maintaining training documentation, and now they are used in the study of many disciplines, not directly related to computing. Even in elementary school, computers are introduced to study elementary courses of mathematics and physics. The microprocessors themselves have received not less widespread than computers — they are built into stoves for cooking, dishwasher and even a clock.

At the same time there are many disadvantages of using the computers nowadays. In addition to psychological harm, the computer has a direct impact on human health. Each part of the harm: the monitor emits harmful ions which reach our eyes and change the reaction of the pupil to light; for the mouse and keyboard cause disease of the joints of the hands; headphones gradually spoil the human hearing system unit develops the electrostatic harmful substances in the air; even our stationary position of the body in front of the computer can affect your posture, spine, blood circulation. Today computer is an essential part of human society. But sometimes we can get lost in this illusion of perfect happiness looking at the painted world, we forget that we are surrounded by real nature. In life we can be vulnerable, and in computer we have all powers that we want. Reading printed texts is more pleasant than to hear the voice. Each person must decide for himself where he lives: in human nature or in the world of artificial intelligence.

Another problem is playing computer games. Today the gaming industry is a very large part of the market, gradually displacing it of the other children. But for the child's body is very harmful to sit for hours behind the monitor and is desperate to press the keys, as the child may develop a kind of

disease — when he's only got one thing on his mind - computer, and nothing more. Children with this disease usually become aggressive if they begin to restrict access to games. These children are immediately lost any desire to do something not computer related and that they are not interested so they start giving up their studies, which leads to not very good consequences.

Modern computers have many functions. Now computers can clearly pronounce different phrases, collocations, play music, etc. People now could write down any words, sentences, and even musical compositions on your computer to then computer can play at any scheduled time. Computers are also able to perceive spoken words as signals, but they have to do a lot of work on the decoding of voice, if the form of communication is not strictly established. Therefore, at this time, it is quite difficult to create a computer that will be controlled by human voice. Many firms are trying to solve these problems. Some firms make small steps towards this goal, but still, these little steps are still almost invisible. But the problem speech recognition is part of a broader problem called pattern recognition. If computers can recognize patterns, they will be able to analyze radiographs and fingerprints, and perform many other useful functions. It should be noted that the human brain copes with recognition even in the presence of various noises and distortions, and research in this area to the approach of respective capabilities of the computer to the capacities of man, are very promising.

Robotics also represents a promising area of application of computers. Industrial plants use many robotic devices now; the unexpected and surprising types of robots start to fill and the research laboratory. There are many surgical and precise manufacturing operations that may be performed by robots controlled by computers. The possibility and feasibility of using robots as servants, waiters, ticket cashiers and in other roles already reflected in the production of film and television, in books. But, unfortunately, is all of the dreams that people are gradually trying to bring it to reality.

In conclusion we would like to say that the computer is an integral part of today's world and we should know how to deal with it in our life because it is impossible to imagine our life without a computer.

Жарников Н.А.
Научный руководитель – ст. преподаватель С.О. Левина
Муромский институт (филиал) федерального государственного образовательного учреждения высшего образования «Владимирский государственный университет имени Александра Григорьевича и Николая Григорьевича Столетовых»
602264, г. Муром, Владимирская обл., ул. Орловская, 23
Email: nikita.zharnikov2012@mail.ru

Supercomputers

Supercomputers are computers with the high level of computing power compared to usual general-purpose computers. Usually, modern supercomputers represent many high-performance server computers connected to each other for achieving maximum. There are few types of server computers connection. When computers are held in the same location and connected by local area network (LAN), this kind of supercomputer is called cluster. The second type is called grid. It is similar to a cluster, but the computers are located in different places and connected through the Internet, so the computing power is spread across multiple locations instead of being located in one place. It is called distributed computing.

Supercomputer uses “parallel processing” to solve the task, which means, it splits problems into pieces and works on many pieces at once, whereas ordinary computers handle one task at a time. This method is called serial processing.

The performance of supercomputers is measured in floating-point operations per second (FLOPS). It is suitable, because the tasks of numerical simulation require calculations related to real numbers, often with a high degree of accuracy, rather than integers. Therefore, the measure of speed of usual computer - the quantity of million instructions per second (MIPS) is unacceptable for supercomputers

The first use of the term “supercomputer” refers to the 1960s. The first commercially successful supercomputer was the CDC 6600 designed by american engineer Seymour Cray. It was released in 1964 and had a single CPU and cost $8 million – the equivalent of $60 million today. The CDC 6600 could handle 3 million floating point operations per second. In 1970s supercomputers used only a few processors, in 1990s a few turned into thousands and now modern supercomputers are using hundreds of thousands of processors (it is also known as massively parallel processing) and are able to handle over 90 quadrillion floating point operations per second.

A lot of modern supercomputers are actually clusters of computers or workstations, which means that they use ordinary and common operating systems such as Linux. The application programs are also written in common programming languages such as C and C++.

Initially, supercomputers were used only for military purposes: they were used to calculate nuclear and thermonuclear weapons. In the process of rapid development of information technologies and their implementation in almost all spheres of human life and society, powerful computers have been used in a variety of areas where complex calculations are required on a large scale. This list includes cryptography, statistics, computational biology and chemistry, physics, Earth science (including weather forecast, the condition of large reservoirs, prediction of climate change) and much more.

Thanks to the supercomputers, many researches were carried out, modern diagnostics in medicine became available, and it became possible to accurately predict weather and natural phenomena. As for the healthcare sphere, only here we can see what a tremendous influence the supercomputers have on our lives: with their help it is possible to obtain effective methods of treatment and to find the causes of many diseases.

In the military industry, supercomputers allow the calculation of new strategic and tactical positions, study ways to improve the efficiency of finished combat equipment and its modernization, develop new types of weapons and protective equipment.

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Канашевская В.Е.
Научный руководитель: ст. преподаватель Фролова О.А.
Муромский институт (филиал) федерального государственного образовательного учреждения высшего образования «Владимирский государственный университет имени Александра Григорьевича и Николая Григорьевича Столетовых»
602264, г. Муром, Владимирская обл., ул. Орловская, 23
E-mail: vlada.shmelkova@mail.ru

Collaboration of Music Teacher and a family as means of dancing skills development at 6-7 year-old children

Federal state educational standard of preschool education aims at "developing the abilities and creativity of each child..." [1]

These tasks are as relevant as our age of computerization and information requires the individual's creativity, search, and knowledge. For the successful solution of this problem, it is important to develop creativity, children's activities, independence from an early age in all kinds of activities, including music and dancing.

Creativity is any activity that creates a qualitatively new material and spiritual values or the result of creating the objectively new things.

Children's musical creativity is the most important factor in the development of child's personality.

Creative activity of children during dancing classes mainly depends on the development of children's ability to embody the character, images of music in movements during music lessons in the preschool educational establishments and in the family. [2]

Family for a child is a whole world. This is the world where he lives, make discoveries, learn to love, hate, rejoice, and sympathize. Here he gets the first communication experience, the ability to live among the people, understands the concept of good and evil.

Cooperation of preschool educational institutions and the family, the creation of a common space for the child development, elimination of contradictions between family education and that in preschool education – these are the keys to solving many problems of education, including development of children’s musical creativity.

It is music and movement which form the child's responsiveness to music, belief in the unusual situation, the ability to perform movements with imaginary objects, to communicate with other children during the improvisation of musical imagery and dance tracks.

Work with parents is a complex and important part of the activity a music teacher performs. Different forms of cooperation are aimed at increasing the level of musical knowledge and skills at parents, creation of necessary conditions for the development of musical and dancing creativity at children. And the main task of a music teacher is to help parents organize musical education in a family.

Being a music teacher, I could say that this work may be interesting to teachers in preschool educational establishments, music teachers, parents, dance group directors and students.

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Кузнецова Е.Р.
Научный руководитель – преподаватель Мацкевич К.О.
Муромский институт (филиал) федерального государственного образовательного учреждения высшего образования «Владимирский государственный университет имени Александра Григорьевича и Николая Григорьевича Столетовых»
602264, г. Муром, Владимирская обл., ул. Орловская, 23
E-mail: nusik_kuznetsova@mail.ru

External storage devices.

A storage device is a storage medium intended for recording and storing data.

Storage devices are divided into 2 types: external (peripheral) devices and internal devices.

In 1945 John von Neumann (1903-1957), an American scientist, put forward the idea of using external storage devices to store programs and data. Neumann developed a structural circuit diagram of the computer. Neumann's scheme corresponds to all modern computers.

External memory is designed for long-term storage of a large amount of information. This is a non-volatile memory, since it stores information regardless of whether the computer is turned on or not. As an external memory of the computer, various disks are used, on which the information is stored. They are called carriers of information.

External devices include magnetic disks, CD, DVD, BD, tape drives, hard disk (hard drive) and a flash card. Most external storage devices can be transferred from one computer to another. Their main drawback is that they work slower than internal memory devices.

A magnetic-optical disk is an information carrier that combines the properties of optical and magnetic storage devices. Recently, magneto-optical technology which uses magnetic and optical recording and reading mechanisms is becoming increasingly widely accepted. Increasingly magneto-optical drives are used to store large amount of information.

The second most common drive can be called CD-ROM and CD-RW drives. As CD-ROMs and CD-ROMs, CD-ROMs will remain relevant for the foreseeable future, therefore, despite the appearance of recording devices, the development of classic (only with the reading function) CD-ROM drives continues - they are becoming more and more fast. Devices with a single (CD-R) and multiple (CD-RW) recording although they get more and more widespread are not superseded but rather supplement the usual CD-ROM wires. Information on the CD-ROM is recorded industrially and it is impossible to re-record it.

DVD (Digital Versatile Disk (previously Digital Video Disk) is a multipurpose digital disk. Its volume is able to satisfy any manufacturer of computer games and encyclopedias for the release of which are usually required causing inconvenience to the user.

DVD data structure is of four types:

- DVD video - contain movies (video and sound);
- DVD-Audio - contain high quality audio data (much higher than on audio CDs);
- DVD-Data - contain any data;
- mixed content.

BD is the format of optical media used for recording and storing digital data including high definition video with increased density.

A classic backup method is the use of tape drives - tape recorders. However the capabilities of this technology both in capacity and speed are severely limited by the physical properties of the carrier. The drawback of the tape drive is the excessive time for sequential data access during reading. The streamer capacity reaches several GB which is less than the capacity of modern hard drives and the access time is many times greater.

Hard disk (hard disk, HDD - Hard Disk Drive) is a permanent memory designed for long-term storage of all information available in the computer. The operating system constantly used programs are downloaded from the hard disk most documents are stored on it. Hard disk drive (HDD) is one of the key components of a modern PC. It directly affects the performance and reliability of the system. Hard disk manufacturing technologies are being improved, the program sizes are increasing, the data on the computer is accumulating.

Flexible disks or floppy disks serve for long-term storage of programs and data of small volume and are convenient for transferring information from one computer to another. To read information from a floppy disk you need a special device - a floppy drive.

A flash drive is a device designed to carry and store information - text documents, pictures, photos, music, video. The device is correctly called a USB flash drive.

Flash memory is a very important and very popular concept in the world of high technologies. The main advantage of this type of memory is its non-volatility. This means that all recorded data is stored even after the shutdown. In addition, information written to flash memory can be stored for tens of years and can be re-recorded thousands of times. Perhaps, the most important advantage is that a flash drive is extremely easy to use. To work with it no special programs are required. You can write to it as easily and quickly as copying information from one folder to another. And it opens on any computer, a modern TV or DVD-player. It is also necessary to underline that modern flash drives are able to "remember" a very large amount of data - up to one terabyte and they are reusable (flash drives can overwrite information hundreds and thousands of times).

Металева Д.А.
Научный руководитель – преподаватель Мацкевич К.О.
Муромский институт (филиал) федерального государственного образовательного учреждения высшего образования «Владимирский государственный университет имени Александра Григорьевича и Николая Григорьевича Столетовых»
602264, г. Муром, Владимирская обл., ул. Орловская, 23
E-mail: dasha_metaleva@mail.ru

An overview of the programming languages.

A programming language is a notation system that serves to accurately describe programs or algorithms for a computer. Programming languages are artificial languages. From natural languages, they are distinguished by a limited number of "words" and very strict rules for recording commands (operators). Therefore, when they are used for their intended purpose, they do not allow a free interpretation of expressions that are characteristic of a natural language.

Currently, there are several hundred really used programming languages in the world. For each has its own area of application.

The first computers had to be programmed with binary machine codes. However, programming in this way is quite a laborious and complex task. To simplify this task, low-level programming languages began to appear, which allowed us to specify machine instructions in a more human-readable form. To convert them into binary code, special programs were created - translators.

An example of a low-level language is assembler. Low-level languages are focused on a specific type of processor and take into account its features, so to transfer the program in assembler to another hardware platform, it needs to be almost completely rewritten.

High-level languages are designed for the convenience and greater efficiency of applications, they are the exact opposite of low-level languages. Their distinguishing feature is the presence of semantic constructions, which describe the structures and algorithms of the programs in a capacious and brief manner. In low-level languages, their description on machine code would be too long and incomprehensible. High-level languages are platform-independent. Instead, the compiler performs the compiler function: they translate the program text into elementary machine instructions.

Among the developers of modern software the most popular the following major programming languages.

Cobol
ALGOL
Pascal
Java
C
C ++
C #
Objective C
Smalltalk
Delphi

This list of programming languages is far from complete, but these are the most popular languages, knowledge of which can be required from the programmer when hiring. All of them are high-level programming languages.

We would like to talk more about the high-level programming language - PASCAL.

Language Pascal (PASCAL) (1968-1971) - the language of procedural programming is the most popular for PCs, which is now successfully applied.

This language is remarkable because it is the first widely used language for structured programming (the first, strictly speaking, was Algol, but it did not get so widespread). For the first time the unconditional transition operator has ceased to play a fundamental role in controlling the order of execution of operators. In this language, strict type checking is also implemented, which made it possible to identify many errors at the compilation stage.

The basis of the Pascal language is the approach from the general problem to the private (simpler and smaller in scope).

The basic principles that Pascal possesses include:

- Structured programming, which is based on the use of subprograms and independent data structures;
- Programming "top-down" when the task is divided into simple, independently solvable tasks. Then the solution of the original problem is completely top-down.

The invention of high-level programming languages, as well as their continuous improvement and development, allowed a person not only to communicate with the machine and understand it, but to use computers for the most complicated calculations in the field of aircraft construction, rocket engineering, medicine and even economics.

Despite the fact that the current level of development of programming languages is at a high level, the trend of their development, as well as the development of information technologies in general, is such that it can be assumed that in the near future, human knowledge in this field will help bring to light Languages that can receive, process and transmit information in the form of thought, speech, sound or gesture.

Остренко А.А.
Научный руководитель: старший преподаватель С.О. Левина
Муромский институт (филиал) федерального государственного образовательного учреждения высшего образования «Владимирский государственный университет имени Александра Григорьевича и Николая Григорьевича Столетовых»
602264, г. Муром, Владимирская обл., ул. Орловская, 23
e-mail: anya.ostrenko@mail.ru

Ecological risk in activity of a person

Emergence of risk of a dangerous situation is bound to development of technical progress, increase of needs of a person, exhaustion of natural resources and natural disasters. From history of development of a civilization we know that at improvement of quality of life safety from unfortunate decreases. The probability of environmental risk is increases.

Ecological risk is the probability of the occurrence of an event having adverse effects for the environment and caused by negative impact of economic and other activity, emergency situations of natural and technogenic character [1]. It is characterized by possible losses and damage to the environment, life and health of a person in a certain time.

Important components of environmental risk are the fact of emission in our environment or unplanned exhaustion of natural resources, the amount harmful substance, type of a pollutant, duration of the polluting influence, a season, a degree of ecological danger of this chemical or physical element.

The environmental risk includes such normative levels as the acceptable, maximum-permissible and negligible environmental risk. The acceptable ecological risk is one which level is justified from the point of view of both ecological, and economic, social and other problems in concrete society in a definite time. Maximum-permissible ecological risk is the maximum level of the acceptable environmental risk. Negligible environmental risk is the minimum level of the acceptable environmental risk.

The balance between ecological and economic development strategies guarantees ecological safety. On the one hand, people are forced to be reconciled with pollution for satisfaction of the material requirements. On the other hand, only the pollution-free surrounding medium is capable to satisfy completely the basic vital needs of a person without it seems his health and life. Therefore any purposes of economic development have to accord with the principle of ecological safety. Damage to the environment is impossible to avoid, but it has to be minimized and economically justified. Harmful effects of economic, production and other kinds of activity should not exceed marginal level. The law has to stop any neglect ecological safety. Activity of ecologically dangerous productions is limited or stopped already at decision making stages. Level of environmental risk is controlled by the state environmental assessment.

The analysis, measurement and assessment of risk reveal its regularities, bring statistics of probability of emergence of dangerous situations and develops strategies on their prevention or decrease in level of their danger. Prediction of ecological consequences of any projects, development and deployment of pollution-free and resource-saving technologies, ecological education and its broad promotion are fixed assets of control of emergence of environmental disasters.

However, it is necessary to consider that decrease in ecological risk is very expensive. If society decides to reduce technogenic risk by costs of ecological development, the costs of social purposes will decrease. If for the state it is necessary to provide social security of society, the expenses on the prevention of natural disasters and technogenic catastrophes are reduced, and the risk of their emergence will increase.

So that to coordinate costs of ecological safety and human needs, it is necessary to consider the condition of acceptable risk. The balance between political, economic, social and ecological requirements is the solution of the problem of environmental security.

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