

Birinchi va ikkinchi masalalarning yechimi ko'rsatilgan algoritmdagi har bir qadam uchun alohida konstruktiv masala hosil qilsa bo'ladi, bu degan so'z 12 qadamda yechimi aniqlanadigan 2-masala uchun yana 11 ta masala hosil qilish mumkinligini anglatadi. Namuna sifatida, 2-masaladagi 7-qadam uchun quyidagi masalani ayta olamiz: - "12 litrlik idishda 9 litr, 7 litrlik idishda esa 3 litr suv mavjud, keltiril-

gan idishlar va 5 litrlik bo'sh idish yordamida qanday qilib jami suvni teng ikki qismga ajratish mumkin?"

Qiziquvchi kitobxonlarga, xususan bo'lajak boshlang'ich sinf o'qituvchilariga ushbu masalalarni maqolada bayon etilgan metoddan foydalangan holda yechishni tavsiya etamiz.

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РЕЗЮМЕ

Maqolada juft hajmli idishdagi suyuqlikni (idish suyuqlikka to'la), hajmlari yig'indisi berilgan juft hajmli idish hajmiga teng bo'lgan toq hajmli ikkita bo'sh idish yordamida teng ikki qismga ajratish masalasi uchun umumiy qonuniyat taklif etilgan.

РЕЗЮМЕ

В статье предлагается общая закономерность разделения жидкости в двухобъемном контейнере (контейнер наполнен жидкостью) на две равные части с использованием двух пустых однообъемных контейнеров, сумма которых равна объему данного двухобъемного контейнера.

SUMMARY

The article proposes a general pattern of liquid separation in a two-volume container (the container is filled with liquid) into two equal parts using two empty one-volume containers, the sum is equal to the volume of this two-volume container.

ANALYSIS OF THE MOVEMENT ACTIVITIES OF PUPILS IN THE EVALUATION OF PHYSICAL EDUCATION AND SPORTS IN GENERAL SECONDARY SCHOOLS

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Tayanch so'zlar: jismoniy tarbiya va sport, o'ziga ishonch, jismoniy tarbiya va sport dasturi, psixologik va emotsional foyda, akademik ko'r-satkichlar, aqliy hushyorlik, o'z-o'zini hurmat qilish, psixologik farovonlik.

Ключевые слова: физическое воспитание и спорт, уверенность в себе, программа физического воспитания и спорта, психологические и эмоциональные преимущества, успеваемость, умственная активность, самооценка, психологическое благополучие.

Key words: physical education and sports, self-confidence, physical education and sport program, psychological and emotional benefits, academic performance, mental alertness, self-esteem, psychological well-being.

Introduction. Recent studies suggest that there is a positive relationship between intellectual functioning and regular physical activity. At present, a number of important issues are being addressed in our country to improve the health of the population. In particular, the involvement of our youth in physical education and sports has become one of the most burning issues in Uzbekistan [3]. Thus, it is of considerable importance in our country to bring physical education and sport to a new, modern level in all educational institutions. It is clear that physical exercise has a positive impact on the level of health of the body and the mental state of a person. Therefore, it constitutes physical education and sport play a crucial role in education of young generation. It follows that it is noteworthy to study the extent of pupils' movement activities in schools. The aim of the study is to engage schoolchildren in physical education and sports based on a study of the volume of physical activities they do. In order to achieve this aim, the following tasks below are required to be carried out:

1). study and analysis of the general state of involvement of students in physical education and sports in our country;

2). to determine the level of children's needs and interest in physical education and sports by conducting pedagogical and psychological surveys;

3). to put forward proposals for the development of measures for the development of mass sports movement in schools.

Literature review. The famous researchers and scientists are working in the field of this scientific problem, and still carrying investigation as well as scientific articles are being published by them in prestigious journals and magazines, for example:

One of the scholars Michel Bronikowski who is the author of book called "Physical education teaching and learning" pointed out that "it is important for all teachers to equip their pupils with social skills that enable them to recognize and look up to universal social and moral values and

positive attitudes. But the process of developing those does not happen automatically during schooling, so it has to be enhanced by specially designed educational tasks and programmes." [8].

An article of "Physical education makes you fit and healthy, physical education's contribution to young people's physical activity levels" that was published by S. Fairclough and G. Stratton deals with the matters of regular physical activity participation throughout childhood years provides immediate health benefits, by impacting on body composition, as well as the fact that it contributes to children's health and fitness level [9].

An article called "Physical education", "health and physical education", "physical literacy" and "health literacy": Global nomenclature confusion" was published by Timothy Lynch and Gregory J. Soukup who provided information on the role of physical education and sport that develop the knowledge, understanding and skills to support schoolchildren to be resilient, cultivate a strong sense of self, make health-enhancing decisions in relation to their health and physical activity participation [10].

Another scientist Richard Stead Dr Mary Nevill carried out a study of a positive relationship that exists between physical activity and cognitive ability of school aged children, and physical education and sport's positive impacts on anxiety, depression, mood, and wellbeing on his scientific work called "The impact of physical education and sport on education outcomes: a review of literature" [11]. –

It is crystal clear from the book called "Physical education Class XI" published by Central Board of Secondary Education, Academic Unit, Shiksha Sadan, 17, that Physical Education helps the learners acquire skills that improve their performance, sharpens knowledge of strategy and tactics, and helps them to transfer knowledge from one context to another, including sport and recreational and outdoor activities. Participation in physical education and sports builds confidence, provides the learning opportunities to

develop skills like qualities of leadership and teamwork skills [12].

Materials and methods. This article was analysed by scientific and methodological literature, interviews, observations, mathematical-statistical analysis and surveys. To study the volume of physical activity of students, a survey was carried out among 5774 students of 16 secondary schools in Tashkent city with the help of those who were third year students and methodologists who were currently working. The questionnaires done by methodologists during the pedagogical practice comprised several blocks. In the first block, the volume of physical activity of pupils in physical education lessons at school, in the second block, the volume of extracurricular activities of pupils as well as in the third block, the volume of movement activities of pupils in additional education and independent physical activities was studied. The questionnaire is composed of questions on the assessment of pupils'

Analysis and results. In the process of studying the volume of weekly physical activities of pupils, morning physical education, physical exercise minutes, physical education lessons, sports sections, independent participation in physical education and sports, walking were taken into account. According to the results of the research, the total weekly movement volume of boys in school was 16.9 ± 8.4

hours while the figure for girls was 15.4 ± 7.8 hours per week. The dynamics of weekly movement volume according to the age indicators of pupils were observed (Fig. 1). A modest decrease was observed in the amount of motor activity between the ages of 6 and 7 years, it was followed by a dramatic increase in physical activities at the age of 11. In term of pupils aged 17, a sharp decrease was seen in the volume of physical activities.

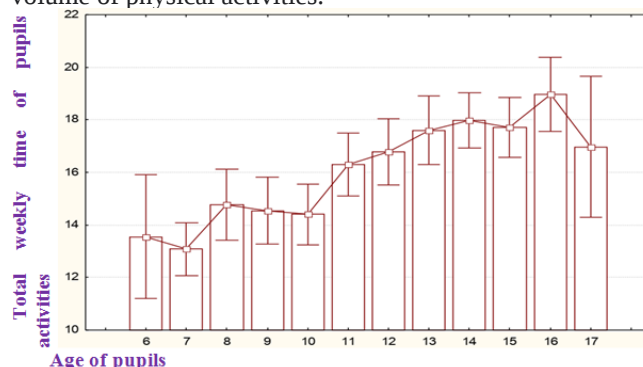


Figure 1. Dynamics of age-related changes in weekly movement activity in pupils.

Table 1. Weekly indicators of physical activity of age and gender characteristics of students

Phase of education	The lowest activity (up to 5 hours per week) (%)		Low activity (up to 12 hours per week) (%)		Moderate activity (up to 19 hours per week) (%)		High activity up to 19 hours per week) (%)		The highest activity (up to 32 hours per week) (%)	
	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl
Starter	3.5	4.8	38.0	31.8	28.2	37.5	27.4	22.0	2.9	3.9
Medium	1.9	1.8	21.4	23.2	22.0	33.7	49.9	39.3	4.7	2.1
High	1.2	4.2	13.9	13.3	29.7	26.1	49.7	54.5	5.5	1.8

It can be seen that the lowest activity rates of boys in the primary class are much higher than those in the upper class. On the other hand, we can observe that the average activity witnessed a significant decrease during the transition from the primary class to the middle class, but in the upper class it again almost returned to the initial state. High activity doubled in boys in the middle class and remained unchanged in the upper class. In girls, a drop lowest activity was seen in the middle class and went up again in the upper class. High activity, on the other hand, was significantly higher in girls in the upper grade than in the primary grade.

The structure of motor activity is shown in Figure 4. Here, the indicator for walk occupied 60%. The next place was occupied by sports sections, 20%. The third place was taken by physical education classes, 11%. Independent physical education accounted for 6.6%, and we can see that the minutes of morning exercise and exercise did not take up much space.

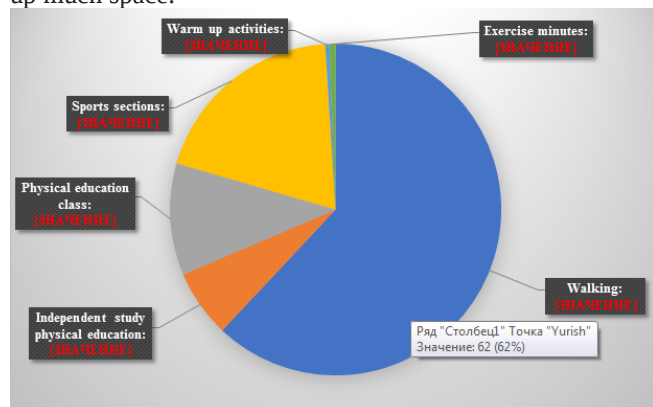


Figure 2. Structure of pupils' weekly movement activities.

Table 2. Changes in the structure of pupil movement activities according to age characteristics.

Phase of education	Physical education classes (%)	Sports sections (%)	Morning warm up activities (%)	Exercise minutes (%)	Independent study (%)	Walking (%)
Starter	12	24	1	1	6	56
Medium	10	18	0	1	7	64
High	10	15	0	0	7	68

There was a tendency for sedentary students to be less active, but those students walked less (average 0.6 to 1.6 hours per week). It was found that low-mobility students were unable to attend classes, had family financial problems, and were addicted to computer games. This situation places the responsibility of physical education professionals on shaping the physical education of those pupils. We observed that sedentary pupils were unable to adequately assess the effects of exercise on their bodies. Pupils who were in good shape explained the reasons of their health by saying that they always went to sports sections and engaged in morning physical activities. It can be obvious that the promotion of physical education and mass sports in schools is the solution to many problems that mentioned above.

Table 3 Internal correlations in the structure of pupils' motor activities

№		2	3	4	5	6	7	8	9	Weekly volume
1	Age	0.00	0.04	0.13	0.07	0.02	0.14	0.30	0.08	0.20
2	Assessing personal health		0.56	0.00	0.14	0.13	0.05	0.06	0.09	0.14
3	Assessing personal physical fitness level			0.03	0.21	0.17	0.10	0.04	0.15	0.18
4	Жисмоний тарбия дарслари				0.07	0.04	0.00	0.08	0.02	0.16
5	Sport sections					0.26	0.08	0.01	0.21	0.59
6	Morning warm up activities						0.12	0.08	0.31	0.28
7	Physical exercise minutes							0.04	0.12	0.12
8	Walking								0.17	0.77
9	Independent study									0.45

In pupils, a strong positive correlation was shown between weekly activity volume and time spent for walking ($r = 0.77$ $p < 0.05$), while a second strong positive correlation was seen when they engaged in sports sections ($r = 0.59$ $p < 0.05$). A positive correlation was also observed between weekly activity volume and physical education & independent participation in sports ($r = 0.45$ $p < 0.05$).

A more moderate positive correlation can be seen in morning exercise ($r = 0.28$ $p < 0.05$). Weak correlations were observed between the remaining forms of motor activity and weekly volume.

Conclusion. The data show that most young people always feel that there is a close connection between physical education and their health. So, this is one of the main keys that we need to pay attention to in today's world of information technology and inactivity, as well as mass sports events are one of the solutions to this problem, as far as we

are concerned. Physical education classes accounted for only 11% of total weekly physical activity. This index will be significantly increased if physical education classes are scheduled for the third hour and the motor intensity of the lessons is increased as much as possible.

The place where the child lives, the family in which he or she is brought up - all these are of paramount importance. Children are encouraged to do safe exercises as homework based on a clear program in physical education lessons, they are given a separate homework assignment and a separate diary to monitor their health status. It will be expedient if their parents are also involved in homework that is given by PE teachers. It should be noted that the guarantee of the health of pupils in general secondary schools, no matter how active they are, is a regulated physical education and sports.

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REZYUME

Maktab o'quv dasturidagi jismoniy tarbiya va sport yosh avlodning jismoniy faolligini ta'minlash bilan bir qatorda, jismoniy sifatlarni rivojlantirishda hal qiluvchi omil hisoblanadi [1]. Bu o'quv va mashg'ulot uchun diqqatga sazovor joy bo'lib, o'quvchilarga malakali harakatlanuvchi bo'lishga yordam beradi, o'ziga bo'lgan ishonchni oshiradi va umr bo'yi jismoniy mashg'ulotlarda ishtirok etish uchun asos yaratadi. Bundan tashqari, jismoniy tarbiya va sport ko'p jihatdan bolalarni tarbiyalash va rivojlantirishga katta hissa qo'shishi mumkin. Ko'p bolalar uchun maktab jismoniy tarbiya va sport dasturida jismoniy faollik uchun tabiiy muhitdir. Jismoniy tarbiya va sport mashg'ulotlari yaxshi joriy etilganligi sababli, bunday mashg'ulotlarga har kuni qatnashish hayot sifatining yaxshilanishi bilan bog'liq bo'lib, turli kasalliklarning paydo bo'lish ehtimolini kamaytiradi, shuningdek, psixologik va emotsional foyda keltiradi [2]. Olimlarning ta'kidlashicha, jismoniy tarbiya va sport miyaning qon oqimini oshirish, kayfiyatni ko'tarish, aqliy hushyorlikni oshirish va o'z-o'zini hurmat qilishni yaxshilash orqali akademik ko'rsatkichlarni oshirishi mumkin. Jismoniy tarbiya va sport maktab o'quvchilarining psixologik holatiga ijobiy ta'sir ko'rsatishi aniq dalil bo'lgani uchun, ushbu maqola umumiy o'rta ta'lim maktablarida tahsil olayotgan o'quvchilar salomatligiga jiddiy ta'sir ko'rsatadigan harakat va harakatlar bilan bog'liq.

Физическое воспитание и спорт в школьной программе являются решающим фактором развития физических качеств, а также обеспечения физической активности подрастающего поколения [1]. Это заслуживающая внимания предметная область для обучения и участия, которая помогает ученикам стать компетентными в движении, укрепляет уверенность в себе и закладывает основу для участия в физической активности на протяжении всей жизни. Более того, физическое воспитание и спорт могут во многих отношениях внести важный вклад в образование и развитие детей. Для большинства детей школа представляет собой естественную среду для физической активности на протяжении всей программы физического воспитания и спорта. Поскольку занятия физкультурой и спортом хорошо представлены, ежедневное участие в таких занятиях связано с улучшением качества жизни, может снизить вероятность различных заболеваний, а также дает множество психологических и эмоциональных преимуществ [2]. Исследователи предположили, что физическое воспитание и спорт могут улучшить успеваемость за счет увеличения притока крови к мозгу, улучшения настроения, повышения умственной активности и повышения самооценки. Поскольку это явное свидетельство того, что физическое воспитание и спорт могут оказывать положительное влияние на психологическое благополучие школьников, в этой статье рассматриваются движения и действия, которые оказывают глубокое влияние на здоровье учеников, поступающих в общеобразовательные средние школы.

SUMMARY

Physical education and sports in school curriculum are the decisive factor for the development of physical qualities as well as the provision of physical activity in young generation [1]. It is a noteworthy subject area for learning and engaging in, and helps pupils become competent movers, builds self-confidence and lays a foundation for participation in lifetime physical activity. Moreover, physical education and sport have the potential to make momentous contributions to the education and development of children in many ways. For the most children, school constitutes the natural environment for being physically active throughout the physical education and sport program. As the physical education and sport activities are well introduced, daily participation in such activities is associated with a better quality of life, can lessen the possibility of a variety of different diseases, and also plenty of psychological and emotional benefits [2]. Researchers have suggested that physical education and sport can enhance academic performance by increasing blood flow to the brain, enhancing mood, increasing mental alertness, and improving self-esteem. Since it is clear evidence that physical education and sport can have a positive impact on the psychological well-being of schoolchildren, this article covers movement and action activities that have a profound impact upon pupils' health who enrol in general secondary schools.

ГЕОГРАФИЯ САБАҚЛАРЫН ИННОВАЦИЯЛЫҚ ТЕХНОЛОГИЯЛАРДАН ПАЙДАЛАНЫП ОҚЫТУЫДЫҢ ӘХМИЙЕТИ

Г.Ө.Жиемуратова – аға оқытушы

Қарақалпақстан республикасы Халық билимлендируі хызметкерлерин қайта таярлау
хэм олардың қанигелигин арттыру аймақлық орайы

Таянч сўзлар: инновация, педагогик технология, чайнворд, креатив, таълим.

Ключевые слова: инновация, педагогическая технология, чайнворд, креатив, образование.

Key words: innovation, pedagogical technology, chain word, creative, education.

Бүгинги күни илим хэм техниканың тез пәт пенен раўажланыўы инновациялық технологияларды өзлестириў менен байланыслы болған жаңа социал-экономикалық, сиясый-мәдений өзгерислерди келтирип шығармақта. Бундай өзгерислер глобалласыў шараятында барлық тараўларда күшли бәсекелесиў орталығын жаратып, белгили дәрежеде тәлим тараўында салыстырмалы жаңа талапларды қоймақта. Билимлендириў тараўындағы бул талаптар шахсты раўажландырыўдың тийкаргы бағдарлары: өз бетинше пикирлеў хэм дәретиўшилик сыпатларын қәлиплестириў, шахсый хэм социаллық активлигин асырыў, креатив пикирлеў хэм өз интеллектуал мүмкиншиликлерине исеним сезимин раўажландырыўда айрықша актуаллықка ийе. Себеби, Президентимиз Ш.М.Мирзиёев «Тәлим хэм тәрбия, илим-пән, ден саўлықты сақлаў, мәденият хэм көкем-өнер, спортты раўажландырыў мәселелери, жасларымыздың терең билимге ийе болыўы, шет тиллерди хэм заманагөй хабар-коммуникациялық технологияларды пухта ийелеўин тәмийинлеў барлық ўақытта баслы ўазыйпамыз болып қалады»-деп атап көрсеткен еди[1].

Улыўма орта билим бериў мектеплериндеги билимлендириўдин мақсети-оқыўшылардың билиў қәбилетин раўажландырыў, алған билимлерин келешектеги турмысында әмелиятта пайдалана алыўды үйретиў. Сонлықтан да, оқытуў процесинде оқыўшыларға тек ғана билимлерди берип барыў емес бәлким алған билимлерин үзликсиз рәўиште раўажландырып барыў зәрүр. Бул билимлерди раўажландырыў ушын инновациялық технологиялардың әхмийети жүдә үлкен. Инновациялық технологиялар арқалы оқыўшылар алған теориялық билимлерин әмелиятта пайдаланыў имканиятына нәтийжелирек ересе алады. Сабақ процесинде инновациялық технологиялардан пайдаланыў арқалы оқыўшылардың мәмлекетлик билимлендириў стандарты талаптарын толық

өзлестириўине, соның менен бирге тәлим сыпатының асыўын да тәмийинлей алады. Себеби, бүгинги күни оқыўшыларда мәмлекетлик билимлендириў стандарты талаптары хэм оқыў дәстүринде белгиленген билим, көнликпе хэм уқыплылық компетенцияларын қәлиплестириў, креатив сын көзқараста пикирлеў, қәсипти дурыс таңлаўға үйретиў ең дәслеп оқытуўшының искерлиги нәтийжелерине байланыслы. Сонлықтан да, улыўма орта билим бериў мектеплерине қойылып атырған талаптардың бири- жоқары қанигели, өз тараўының билимданы болған оқытуўшылар базасын қәлиплестириў менен бирге методологияның дурыс шөлкемлестирилиўи, таңланған технология хэм методлардың темаларға сайлығын тәмийинлеў. Хәр қандай педагогикалық технологиялар хэм методлардың нәтийжелилиги оны пайдаланып атырған оқытуўшының дәретиўшилик хэм қәсиплик шеберлигине байланыслы. Сабақ берип атырған оқытуўшының қәсиплик шеберлиги оқыўшылардың жасы хэм билим дәрежеси, қызығыўшылығы хэм бар имканиятларын итибарға алған ҳалда дурыс түсинилген методларды таңлағанында хэм әмелиятта қолланғанында гөзленген педагогикалық мақсетке ерисиў имканиятына байланыслы. Инновациялық технологиялардан пайдаланыў билимлендириў процесине бир қанша ўақыттан берли кирип келген болса да хәзирги күнге шекем оқытуўшылар «интерактив методлар» менен «технология» түсиниклерин дурыс ажырата алмайды. Мысалы, истәжирийбемизден келип айтатуғын болсақ, Сиз қандай технологияларды билесиз? деген сораў арқалы усыныс етилсе оқытуўшылар ең көп «ақый хұжим», «кластер», «ПСМУ» хэм басқа технологиялардан пайдаланаман деп жуўап береді. Биз мектеп оқытуўшыларын бул түсиниклерге елеге шекем анықлық киргизип түсинип алмағанлығы ушын айыплай алмаймыз. Себеби, бүгинги күнге шекем педагогикалық технологияға тийисли методикалық әдебиятлардың көпшилик мектеп оқытуўшыларына