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Keywords: *learning workload/motivation, desire to attend school, child/student health/development, sleep/adolescence, daily routine, positive thinking/positive emotions, values, self-confidence, "transparent education and plans", updated (UTA) programs.*

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THE INFLUENCE OF LEARNING WORKLOAD ON SCHOOLCHILDREN HEALTH DEVELOPMENT AND TEACHING MOTIVATION

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I. INTRODUCTION

Every nation puts all its hopes in children. As teachers, parents and active community members, we can impact the lives of young people every day. We can help young people become active members of society. We change their future by caring for them, understanding their problems, showing them possible solutions and teaching them. <...> We encourage our children to be the best version of themselves <...>. We must teach them more than the names of state capitals and mathematical functions. They must learn to respect themselves and others. We can help them build strong relationships with family, peers, school, community and the world around them. Our children need the self-confidence they can gain by developing their talents. They need to learn to control their emotions constructively and set positive goals. Children must acquire the knowledge and skills necessary to lead a healthy and safe life <...>. We can help them develop this essential knowledge and skills (International LIONS QUEST Association, 2019). By the State Education Strategy 2013-2022 (from now on - the Strategy), the strategic planning of Lithuanian education

continues, the efforts of the educational community are mobilized for fundamental changes in education that meet the expectations of society, the primary needs of the state, and global educational trends. Taking into account the aim of the Lithuanian progress strategy "Lithuania 2030" to create an intelligent, active, solidary, educative society, the strategy sets a fundamental task for education - to mobilize the educational community and all the people of Lithuania (solidarity) to constantly train purposefully, to achieve personal and national success, ensuring equal opportunities <...> to form a positive public attitude towards the family. Generational solidarity is fostered in society; a harmonious family is strengthened as the essential community cell and a guarantor of the nation's survival, where a free, creative and responsible person matures. Education is an activity aimed at providing a person with the basics of a full-fledged independent life and helping him/her constantly improve their abilities. Learning is the natural right of every human being. Education protects and creates the nation's identity and transmits the values that make human life meaningful, society's life harmonious and solidary, and state progress and security. It is a priority area of public development supported by the state (EDUCATION LAW OF THE REPUBLIC OF LITHUANIA (summary version), 2022. In Article 40 of the Republic of Lithuania Law on Education: material provision of Education and learning workload, it is claimed that the learning environment at school and the learning workload of students must comply with hygiene norms and safety health requirements of students established by legislation and guarantee the implementation of educational programs. However, long-term studies show that the current academic workload of Lithuanian students is not compatible with real students' physical and mental abilities to maintain the implementation of educational programs, it contradicts the performance of a healthy daily routine for students, does not meet hygiene standards, and also require human logical correction. The hygiene standards for the preparation of the school education plan have been determined- LITHUANIA HYGIENE NORM HN 21: 2017, must be helpful for students, educate/teach students within their capabilities as children, not to increase, but to shorten their time at school. Analyzing the long-term situation of homework in Lithuania, the most beautiful thing that has been done for children's future - for their healthy development- is that a system was created in the elementary grades that allow children

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not to be assigned to do homework and not be evaluated by grades. However, research shows that grades are written in individual institutions, and reading is assigned in all public schools and levels. More than ten years ago, the links between the learning workload and students' psycho-emotional well-being were established: students who assess the learning workload as too high are more likely to feel tension at school, their motivation to learn is weaker, they have a worse image of the school as an institution, they feel a greater fear of teachers and their peers, the general well-being of students is often negatively affected. Better relations with parents are indicated by those students who think that the learning workload corresponds to their capabilities. Too much learning workload harms the elements of the daily routine (Sketerskiene; Šurkiene, 2009). However, it was not possible to adjust the training workload.

In Lithuania, there have been no significant studies on effectively teaching various subjects to students of different genders and ages. Also, in the last decade, there has yet to be a thorough study of the workload of schoolchildren, which corresponds to real-life hygiene norms. Schools must understand how to effectively teach various subjects to students of different genders and ages. It is difficult for "schools" to adjust the teaching/learning workload purposefully because they lack knowledge and understanding of children's development and daily routines. Schools "feel perfectionist" that children can work at an adult's pace and have no information about children's actual sleep and rest. There is an increase in the number of children with special needs because, at a particular stage of development, children are not required depending on their age (starting with the methodology in kindergarten, where the lessons are not in a "game" form; in primary schools, grades are used, which significantly traumatizes children's psychological state due to a lot of negative evaluation and the reason is that a child does not know something, and by the way, it is not child's job to know; children "do not have time to fall in love with science", because from early childhood they already develop a fear of science; psychological aspects are not taken into account when transitioning from primary to primary school; the importance of the teenage period is missing, when significant changes take place and physiological personality changes).

For this reason, one of the prior directions for updating the educational content is developing scientific potential on this topic in Lithuanian higher education institutions that train pedagogues. It is essential to build a purposeful path, not to put all the decisions "on the shoulders of the school". All innovations must be implemented with the help of significant research, scientifically verified, so that children have as little stress as possible. It will help overcome differences in student achievement, increase social inclusion, and, most

importantly, preserve children's health. It is necessary to provide scientifically based methods and tools that would allow this practice to be successfully implemented and developed.

An actual problem of the organization of the modern education process is the effort to create a healthy daily routine, to choose ways of presenting educational content that help reveal the individuality of the students, their self-expression, help to accept information and integrate into the educational process according to personality differences, individual learning style (Statauskiene, 2009; Juralovic 2018, 2021), and most importantly according to the student's age, not exceeding the possibilities of his age, so that he feels emotionally safe as he grows. However, this can only be achieved if there is a fundamental teaching load that corresponds to the age of the child/student.

The goal is to analyze the impact of the training workload on students' health/development and training motivation.

Tasks:

- 1) Analyze the concept of healthy development according to Humanistic pedagogy;
- 2) Analyse psychological and pedagogical literature on practice;
- 3) To determine the total learning workload of various subjects at various levels and its impact on the health/development of schoolchildren (daily routine, motivation to learn, sleep, compliance of the workload with the age of the schoolchildren to learn "safely" and preserve physical and mental health);
- 4) Identify the aspects of inadequate/defective didactics/methodology in schoolchildren's education and their consequences;
- 5) Identify factors that promote positive/healthy personality development, promote learning motivation, desire to attend school, develop self-confidence and human value thinking.

The concept of healthy development according to Humanistic pedagogy: Child development can be defined as a sequence of biological, psychological and emotional changes that occur from birth to the beginning of adulthood. In society, we talk about what specific actions and things a child needs, and we forget to talk about what the child's spirit needs. The most important thing for a child is absolute, unconditional love that does not demand anything and does not judge the child's actions: *I will love you always, even when you do not behave as I expect.* It is necessary to help the child to grow up as a person with developed emotional intelligence, socially skilled, self-conscious and happy person so that he can recognize and name his own and others' emotions, that can be empathetic, ready to do good things, < ... > would care not only about himself but also the interests of others, be cooperative, feel responsible for the impact of their lives for the future generations <...> would know what is good and what is

bad <...>. Philosophy claims, and its practitioners observe, that babies come into this world with a strong sense of justice, a need for beauty <...> and an instinct to live rightly. The environment helps the child develop the skills to forever realize or suppress this instinct. We should pay attention to 1) Goodness is cultivated by goodness; 2) Peace develops peace; 3) Only love develops love; 4) Only patience develops patience; 5) Politeness is cultivated only by politeness; 6) Personality is developed only by personality; 7) Only generosity develops nobility. These simple axioms mean that our behaviour as parents and teachers is an essential lesson in emotional intelligence, social skills, and morality. <> It is important to realize that even if our moral teachers are perfect, schoolchildren's ability to act as they please is limited. The main reason is the low level of brain development. Even if the child's consciousness has received the signal *not to eat candy until dinner*, it does not mean he will do so. The signal does not always travel to the behavioural coordination centre because the corresponding brain pathway is not yet firmly established. But repetition is the mother of science. Patience is a virtue. In addition, you will save a lot of energy if you stop demanding impossible things from your child. Humanistic pedagogy can help us to understand who a child is. It is a philosophy of approach to the child. Maybe that is why everything cannot be that simple. Humanistic pedagogy is primarily the opposite of authoritarian pedagogy, in which the teacher can command, force, and explain how to live but not necessarily be an example. Humanistic pedagogy encourages one to look at the child as a person even before birth and to delve deeper into what a person is and how to help him become a person. It is a way of approaching the child and his education process. A philosophy that encourages the teacher to be conscious, to think about who the child is, who the teacher is, and to teach the child the most important truths about life and its meaning. This philosophy also tries to accept the child as a teacher, a source of truth and light. Goals and values of the educational process of humanistic pedagogy <...>: love and respect your neighbour, treat people the way you want to be treated, speak nicely, do good things, be sincerely polite, sympathize and help. This is the unshakable basis of the main message of every session, every moment of work and creativity with children/students. However, everywhere and always, we, teachers, parents, and everyone who surrounds the child's life, must fulfil three necessary conditions: 1) be especially patient; 2) love children unconditionally and tenderly; 3) feel responsibility for their future, for the impact of their actions on their lives. It is important to understand what laws affect the child's behaviour. Remove from the child's environment poor examples and activities that lead to regression of emotional intelligence, hinder the development of normal social skills and develop

immorality instead of morality. Fill the child's environment with good content: exemplary teachers, good fairy tales/books, sayings <...>. All these moral principles must be implemented proactively <...>, and at the same time, remember that the world is diverse. It will not be possible to completely clean a child's life and try to make it unnatural, but good role models must dominate. A child has a natural right to learn and improve, but he also has the right to freely choose, to discover himself, and to engage in those things that seem most important to his spiritual development. Interesting fact: phones, movies, and tablets, used too much, weakens intellectual capacity. In developing fine motor skills and all other skills, the rate of improvement is determined by the amount and nature of practice. <...> A child's Physical development greatly affects all other areas of development. If a child moves a lot, he is physically and intellectually strong. And vice versa, if a child has a considerable intellectual load and studies a lot, you must consider his kinesthetic (body, physical) intelligence. Mobility reduces the amount of stress hormones in the body, so movement is suitable for reducing and preventing stress. Our efforts, books, toys, activities, words of support and love are like soil, water and sun that help strong plants/plants grow and bloom. Scientists have agreed that genes play a role, but practice (by its very nature) allows some genes to manifest and others to remain dormant. A child of a family of composers who grew up in a coal miner's family will not become a composer. Therefore, as you look at the beautiful jar of seeds, keep asking yourself which seeds of your child's potential will germinate. (Goleman, 2009).

Concept of learning workload. Practice shows that the workload of training is understood as the student's presence/teaching at school, the duration of the lesson, the duration of breaks, the performance/duration of homework, as this is the activity/task assigned during the lesson and is an integral part of the training. , therefore, it counts towards the school/teaching workload. So it can be said that students work at school for about 7 hours plus at home less often 2 (more often 3-4) hours with assigned homework, the total workload is about 9-10 hours, the rest of the time is for extracurricular activities, spending time with family, nutrition/meals and sleep. In the documents of the LRSMM, it is established that the learning workload is growing for several reasons: 1) Organization of the educational process in schools (setting up lessons, tests, timetables). 2) The documents regulating the educational process - General programs and educational standards - are too large. 3) Organization of the learning process in the lesson. Instead of selecting the most necessary subjects, teachers provide students with many additional facts and concepts. The learning workload also arises from insufficient differentiation and individualization of the learning process in lessons <...>. 4) More isn't always

better. Each student achieves results according to individual capabilities at his own pace. The school should make a monthly or trimester control schedule. *The test can take various forms - not necessarily a written work but also an experiment, a musical project, or a work of art. It is also important to plan the time of control tasks - you need to consider whether the child/student will be active and not tired. Controls are advised to allocate the most productive time of the day - the second and third lessons. It is best to write them in the middle of the week - on Tuesdays and Wednesdays.* Very often, the tests are shifted to the end of the trimester. It is important to arrange the checks evenly so that the child is not overwhelmed by an avalanche of payments at the end of the trimester. *Homework in the fifth grade* takes about 1.5 hours to prepare (or they might not). During this time, the fifth grader should be able to complete all the tasks. If there were six lessons that day, each of them has 15 minutes for homework. Nevertheless, some subjects, for example, mathematics, mother language, and homework, are usually assigned longer, so nothing is given for other subjects that day. *<...> Homework is not assigned during holidays and days off.* It is not advisable to start preparing lessons immediately after returning from school. There should be a 1.5-2 hour break between lessons and their preparation at home. It happens that the student leaves the lesson without understanding anything. If this continues for a long time, unlearned things begin to accumulate. To catch up with the peers, a child has to sit with books longer at home, and sometimes the opposite happens – a child becomes disappointed with himself and loses the desire to learn. The backlog increases, and the achievements deteriorate. For the educational process to be successful *<...>*, the pedagogue must try to find out what the child knows and does not know, whether he understood everything during the lesson and whether he is less successful. The teacher must use the class time as effectively as possible so that the student achieves the learning result and has as little work as possible at home. Children are different - some need more, and some need less time to learn new things and develop skills. *<...> The teacher must individualize the teaching methods - try to adapt the lesson's content to each student individually so that he/she successfully achieves the learning outcomes. People are different - with different talents and inclinations. Only 10 per cent of gifted children do everything perfectly. The workload also increases when teachers work only according to the textbook, but the authors tend to put much more into them than the educational documents require. Only elements which will help to achieve the learning result should be selected from the textbook. The general educational programs provide that children must be able to work with information - search for it, and draw conclusions (LRŠMM. PENKTOKAS). Learning*

motivation increases when the student feels that what he is doing is interesting, relevant, useful, necessary, and understandable, and he feels satisfaction with his work and results. *The learning workload also depends on the complexity and quantity of tasks. Motivation can be increased by reducing the workload - it is higher when the tasks seem manageable to the student and lower when the workload is too high.* There could be no homework. It is best that children are given no more than 15 minutes daily for each subject and give 100 per cent. Homework should be checked. *By reducing the amount of homework, the student would have time to focus on the desired field.* Increase not by grade but by the number of subjects evaluated for credit. At least for a day, and preferably a week, to be "in the child's shoes" performing the assigned tasks of all subjects. *<...> With the start of remote education, to get a 10, it was necessary to study for 18 hours per day; teachers left part of the work to the children to complete independently (EDUCATION NEWS). Meaningfulness and motivation of students' learning).*

The impact of learning workload on children's health/development. After analyzing the learning workload, it can be said that the change in the education system should start with the planning/regime of the student's day, and only then programs, methodology and the work of teachers should be discussed. It is important to study carefully the very simple things and ensure that appropriate educational rules that are valuable to children and teachers are followed. No one has ever carefully analyzed the student's schedule, how long he stays at school, how much time he has, what time his classes end, and what the are activities during breaks. A common school has three breaks of 20 minutes each, the reason for such long breaks, managers say, is that all children have to eat, but studies show that children waste time, they usually eat at the same time and, of course, food in a box is sometimes better than food to grab. Surveys of parents show that the number of children with digestive and spinal problems is increasing. We are restoring the school environment, but the most important thing is the health of students and teachers, relationships, and, last but not least, education. The conclusion is: shorten the breaks and the number of lessons so that children have the opportunity to eat a warm lunch at home and can engage in additional education in "school time" and sleep more than 6 hours every night (optimally includes 9/10/11 (at least 8 hours) hours of sleep, so that all phases of sleep are covered. Melatonin and serotonin are produced in the child's brain). Research has shown that most of the schoolchildren's lessons end at 15-16 hours (starting with primary and fifth/sixth graders), in the best case, at 2 o'clock. An ordinary elementary or fifth grader works even 7 hours a day; not all adults are capable and work that much. Unfortunately, the modern

school usually prepares two schedules: one for the state, the other for the children and parents, because the wrong thinking is still rooted in the fact that it is not the quality but the quantity that matters; the more lessons, the more knowledge the child will "get", become smarter and pass exams. However, such schedules are detrimental to the daily routine of schoolchildren. The school schedule usually does not correspond to the daily hygiene norms of the student; the student cannot work/study at school for 7 hours during the day. It is already the second shift, and the child "works" like an adult. Appropriate methodology and useful, comprehensible, not overloaded subject content can save class time. It is not the quantity but the quality that determines the student's knowledge acquisition, learning motivation and personal progress. Keeping students in schools "as they see fit" is unnecessary. The student must engage in extracurricular activities according to their interests. When the children return home, they still have to prepare their homework, the complexity of which not every parent will explain - there is no logic and the goals of such education and science are unclear. The amount and complexity of homework do not correspond to the age of the children. For example, usually for a student, even in primary and basic education, 4-5 are scheduled for the next day, there are even six tasks for six subjects, and the homework for one subject usually covers several methods (reading, writing, repeating, memorizing), which means that one subject must at least a few more tasks. Thus, it can be said that one thing often turns into "multiple things" and takes much time to complete. This is already a "student" methodology. There is a lot of stress on the child's growing personality because every child wants to catch up with everything and remain positively evaluated. Negative grades, disappointment with education, and, most importantly, their personality appear. As a result, the student develops fears and loses the motivation to learn. He knows he is "unsuitable" because he cannot maintain the full workload. As a result of such a pace of life, many children with special needs appear because this nature of science in education systems is already in the first grade, and it greatly "damages" children's psychological state and exhausts the nervous system. Studies have shown that, on average, a gifted student does homework for less than 2 hours. more often 3-4-5 hours. Negative grades are demotivating. Where teachers do not feel the student's age and do not find the appropriate methodology according to the child's way, there is an irrational giggle of negative grades for class and homework, control and independent work, various tests, etc. The vague terms "control and independent" work hurt children's psyches. The term "control" and its interpretation have depreciated and are "barren" because they cause a feeling of fear in the student. A child should be valued first for his efforts and then for his

knowledge. It is important for the psychological safety of children to comply with the rules of the Education Act: several checks are not allowed in one day, but they are common in schools. Consequence: Children hate school and feel as if they are "imprisoned by education". Education experts suggest changing the tests to be accessible, passable and positively evaluated by every student and teacher. It can be concluded that the hygiene norms of Lithuanian schoolchildren corresponding to the healthy development of the schoolchild have been violated: the student's feelings, sleeping hours, and extracurricular activities (time for revealing abilities/talents, becoming a personality). A happy, peaceful, warm presence in the family is important for children so that homework does not become a reason for quarrels in the family. The most important thing is the family's well-being, not how much is "crammed" into the child's head according to a rigid educational plan. *During the pandemic, many parents and teachers saw a real "system/life science/learning(s)" in which our children/students "exist". The excuse that the "pandemic" caused such a burden on the children is meaningless. Paradoxically, the "pandemic" only highlighted and showed all the shortcomings of the Lithuanian education system and especially showed the enormous workload our children should handle, which is why it was difficult to teach children because basic science is based on homework and about 50% of students master basic knowledge with the help of tutors.* Meanwhile, teachers say that general programs are too complicated for students. There are excellent teachers/leaders in Lithuania who were "broken" by an inappropriate/defective education system/strategy. Today's teacher has daily contingencies, which are "nerves". A teacher cannot create qualitative lessons, having to teach his subject and also participate in various projects, seminars, exhibitions, integrate with other subjects, organize excursions, presentations and "sit" at school over time, when the brain has to rest. The next day the brain has to function by devoting oneself to pedagogy. It is a pity, but the modern teacher works like robots and constantly "something is demanded" from them, and they "must" smile. Of course, children need a smile. The wisdom and calmness of teachers of a respectable age educate children much more than ICT - that needs to be understood and respected. Most students are addicted to smart technology. Training seminars will not help; the best Lithuanian teachers who are teachers by nature "disappear" (leave their jobs) because both the teacher and the student are human and have "limited" opportunities for work and rest. Schools have been trying to regulate workload for decades, but long-term research shows that it is impossible without a specific system. Children's psychological state and harmonious relationships in families are still affected because the most important thing is the regime of children so that they develop



according to their age and become happy individuals. In schools, it is impossible to regulate the amount of homework; it must be specific/concise/accessible and manageable for every student or there should be no homework at all. The most important thing is the emotion when learning and absorbing something new. Just as teachers' plans must be "transparent". This means what (thing), in what environment (office, theatre, museum, nature), how much (information), in what ways (mostly three to suit each kinesthetic, visual, audio) and in what time (e.g. during one lesson or more) children will learn, absorb, what knowledge, skills they will acquire and whether they will be positive at that time, whether learning will bring them joy and self-confidence and whether they will tell their parents that they hate school and do not want to attend it anymore. For some reason, educational innovations are placed on the school's shoulders; schools must themselves accept, implement, and stabilize "somehow". Then, the students become the object of a new experiment. By the way, there are facts that pre-kindergarten groups work similarly with "non-childish homework", as well as little fine motor skills are developed, there is a lack of variety of activities where children have to work a lot with their fingers, not only drawing but also sculpting, construction, where both hemispheres of the brain develop at a certain age. The child's language development, coordination and mental awareness depend on it. In primary schools (especially those of ethnic minorities), teachers are forced to teach the creative technology subject during breaks and in an extended group; children have no idea about real happy creativity because the minimum mandatory number of lessons in all subjects in the general programs is higher than in only Lithuanian schools and teachers that teach "over-teach, pressure" children, without even integrating creative subjects/methods. Children hide in themselves before they have time to adapt. *In this place, the hygiene norms are severely violated; it doesn't matter that there are more things; there must be a "healthy" load.* It is difficult, but it is possible to choose the right way by including all three main senses of training: hearing, sight, and feeling (kinesthetic, visual, audio). For the well-being of children, it is important to adjust the minimum number of lessons per student per week in the updated curricula (UTA), which were also "old" (the year 2008), so that it is the same in all schools and those where teaching in the language of the national minority is legalized. For example, fifth graders have five (5th) extra hours/lessons. *It is just another working day for a student, but there are seven days a week, two of which are for the student's mental and physical rest. This seriously disrupts the daily routine.* More classes, more homework, a child's backpack is heavier (some fifth/sixth graders reach 5/7 kg), classes end late (around 3–4 pm), sleep late, parents restrict extracurricular activities, chronic fatigue appears, immunity weakens,

lack of joy of life, because children feel imprisoned by science. Then there is a feeling of inferiority and a feeling of hating school, not attending it, and quarrels arise in families, misunderstanding each other, because some parents think that their child cannot study, while others "press" them to be able to. However, studies show that the workload for children is simply inadequate; it affects children's nervous system and development - health. *There are facts that those "scientists" and pioneers, to whom the whole class is being compared, are mostly children engaged in one scientific activity, under much pressure from their parents, usually with no additional education (groups) and physically weaker - they are one group of susceptible children, as if "trained" only for victories. Sadly, we are raising a generation of very vulnerable perfectionists.* In Lithuania, dividing students into groups according to abilities is common in basic education institutions. When admitting students to schools based on educational results, there is a risk that the division of students not only according to ability but also according to social and economic status will take effect. In 2018, a new (UTA) ability-based educational program was started in Lithuania. Its purpose is to help improve student learning outcomes. Preparatory work included training of teachers and school leaders. It is planned to start implementing the new educational program in primary and secondary schools from the 2023-2024 academic year. Implementing this reform will also change the achievement evaluation system, according to which the main focus is currently not on complex skills but on subject knowledge <...> (Lithuania. Education and Training Monitor, 2022). It should be emphasized that school leaders are usually "obeyed" by educational documents, and schools are given too much freedom, responsibility, and "burden" when drawing up a school/gymnasium education plan in deciding the future "fate" of children's education. Therefore, all science is based not on quality but on quantity. When renewing/changing the general programs of Lithuania, it is important not to increase but to reduce the workload of education because the UTA is too complicated for children/students, too demanding of what students should be able to do when completing primary, basic/secondary education. Also, developing information technologies in primary school will only increase the workload on schoolchildren's education and health risks will increase, especially the needs of students. By implementing the latest programs into the current workload of Lithuanian schoolchildren and teachers, it can be said that there will be "neither healthy teachers nor healthy students". Such requirements will encourage even more children with special needs, teachers will conform to the requirements, and children's psychological state will be damaged.

Aspects of flawed educational strategy/didactics/methodology: Here are a few examples. Could each of us adults memorize, twice a week, a few texts in English (when it is not the mother tongue), without even retelling, being in the fifth grade and getting two fours in one day for evaluation? For today's fifth grader, regardless of age, it is a huge test of his feelings, stress and, as a result, regression in other subjects. Fifth graders are in a transition period, not just from fourth to fifth grade. It is probably not even necessary to state conclusions. This is a common methodology used by teachers. What do parents do in such a case - they hire a tutor if they can afford it, others try to make "pointless" agreements with teachers, and others pressure their child as best they can, depriving the child of all his hobbies. It is a "salvation" for children if the teacher differentiates the tasks, but then he lowers the grades. The problem is that most teachers teach, "over-teach", and set goals that are not age-appropriate, claiming that this is what the general curriculum says. Meanwhile, children's development is affected, and what kind of learning can we talk about here? These are sad facts. Educational specialists/teachers must take into account the psychological characteristics of the adolescent period and emphasize the transition from primary school to primary school, which coincides with the transition period from junior school age to adolescence (11-12 years old), during which physical, psychological and social changes are important. Another example of a similar methodology is answering on the blackboard in front of the whole class. *Case study.* One gifted fifth-grader was so worried when answering at the blackboard for the first time that her mother calmed her down only with the help of sedatives. However, the teacher told the following lesson to bring a chair to the blackboard and answer while sitting, and only for her to facilitate answering. Another case was when another fifth grader had to answer in front of the whole class as well, and then he was unable to answer during other classes. Such methodologies should be abandoned forever. These are just a few cases, and there are many more. *The important role of teachers is delicacy and clear and reasonable requirements that correspond to students' abilities. It is necessary to notice the smallest achievements of the child to praise him for his merits and work. Assessment should promote personal development, positive self-awareness and self-motivation to learn. Lots of positive reviews. Abandon the phrase "students evaluate each other" methodology, which disrupts the creation of friendly relations and the socialization of students. A commendable method of self-assessment. "Experimental projects" with teenagers, where any negative evaluation exists, disrupt their perception of the world because it affects their feelings. Abandon "answering at the blackboard" because when standing in front of the class, children are more*

vulnerable; let them answer at their desks and of their own volition.

Ugly writing reasons: Research shows that by the fifth grade, the student tries very hard to write down in the notebook everything the teacher tells him during the lessons, and then some students' writing becomes "terrible" because they cannot keep up and are very worried about it. Of course, teachers always deduct grades for "crooked letters." A student does not have to write quickly after finishing primary school; quick writing makes the writing messy and wrong. On the other hand, some children's handwriting is beautiful and neat, others are not yet formed, and this is absolutely normal. It depends on several reasons: the level of development of fine motor skills, the child's development, and the teachers' requirement - the pace of work for children to perform one or another task. Also, by demanding certain notebooks with "big" lines, teachers are doing a "disservice" to themselves and their children because research has shown that writing in a primary school notebook at a student's pace is a big help in forming/consolidating beautiful handwriting and orderliness. Sometimes, it takes all the "spare" years for the child to move to another notebook, which is the norm. This process is called adaptation and humanity. Knowing that children's handwriting has nothing to do with their intelligence is important. These are intelligent, gifted, advanced and high-achieving children/people.

Number of notebooks in one subject: When a child enters the fifth grade, another world opens up, similar to how a twelfth grader should immediately defend a research paper. It is hard to pick the right example, but the jump is huge. Many new things, new teachers, different methods, and a new environment and if it is still a school for ethnic minorities, then the child immediately moves as if from the fourth to the seventh grade because several other things contribute to him, and it is a heavier burden not according to age. Studies have shown that some subjects, that is, one subject has 3 5 five notebooks. It is not clear why so much is needed. A student's backpack is heavy. One thing is one notebook and no notebooks for tests. Children are much calmer when it is "just" a notebook. By the way, teachers are required to check all notebooks; this is a small part of their salary and additional, but research has proven it does not always necessarily work. It is common for a student to receive "red-painted" notebooks as feedback. Tired teachers mean tired kids, which continues like a "vicious" cycle for many years. A person said to be empty inside will certainly not "give" anything to children. And it is no longer a secret that the emotion with which we give or receive information when we explore something new and when we acquire new skills is important. The result depends on how you feel. Positive thinking is a driving force in all areas of life, and our

children will be stronger when they realise it. We can only instil it in them through our examples. *"Excessive" use of smart technologies negatively affects the development of fine motor skills.* According to British doctors, smart technologies slow down the development of children's fine motor skills. <...> Lithuanian pedagogues and specialists also notice that more and more children, when they start school, hold their writing instruments incorrectly. They advise developing fine motor skills for small children and older children because trained finger movements increase children's *self-confidence and self-esteem*. British paediatricians claim that modern children find it more difficult to hold a pencil or pen because their finger muscles are not sufficiently developed due to the frequent use of phones and tablets <...>. *The fine motor skills of children who started attending school ten years ago were much better developed.* The tendency to hold the writing instrument irregularly and the number of left-handed people is increasing. Children without additional education and training now find it more difficult to hold a pencil and a pen, write and draw. Unfortunately, *technology is changing the development of fine motor skills.* At an early age, the development of fine motor skills is related to the development of language, and as the child grows up, it is related to the ability to independently perform various tasks, fasten buttons, use tableware, pick up something, turn it, open it, construct it. It is a mistake to think that the movements of the fingers are trained by themselves. Specialists at the Child Development Center say that children who are fully educated from infancy have much better fine motor skills than those whose education is given less attention and time. The development of finger muscles is also slowed down by the fact that technology too often distracts children from activities important for developing fine motor skills. Children who are immersed in technology are less likely to engage in other activities, especially drawing or building, which are important for hand and finger development. Tablets and phones should be given to children minimally and purposefully. The development of children's skills in schools is changing. The rapid development of technology forces us to teach children in such a way that they adapt to new conditions and easily manage and understand the new tools that appear. Developing fine motor skills <...> to employ the fingers properly in early childhood and school age is important. <...> If fine motor skills are not developed, children often do not know how to hold a drawing tool correctly; they have difficulty drawing shapes and signing numbers and letters. They have a harder time cutting with scissors. Developed fine motor skills influence children's independence skills: the more activities a child can do by himself, the more confident and happy he will be. At school, the child will feel fulfilled and confident. It is extraordinary to get today's kids away from their screens and engage them

in other skills-building activities. Children of this generation need *engaging, creative and tangible results*: drawing, cutting, sculpting, and building. While constructing, children play and develop their fine motor skills and other abilities <...>. Much attention should be paid to the development of modern children's fine motor skills (Medicine. It, 2018). According to R. Kėvala (2021), excessive and excessive use of information technology can cause serious damage not only to mental but also to physical human health. Therefore, it can be concluded that it is important to use ICT (information and communication technologies) in moderation during lessons, taking into account the permissible norms of ICT hygiene. Pay particular attention to mobile phones, which are boldly used (during online and contact learning) for educational purposes in all classes and subjects, regardless of the children's age, health, capabilities and knowledge. Mobile phones emit negative radiation, and the dependence of school children on this means of communication and communication is increasing. Allow the phone to be used only for its intended purpose and outside of class.

The importance of "happiness" hormones: Melatonin is a hormone of the pineal gland which is produced during the dark hours of the day. Light at night suppresses melatonin production. Melatonin is an important biological regulator of the body. It regulates daily and seasonal biorhythms, glucose metabolism, activity of gonads, activity of the cardiovascular system, activity of the gastrointestinal tract, activity of other endocrine glands, and activity of the immune system. *The name "melatonin" is made up of two words: (mela-) because of its effect on melanocytes, (-tonin) part of the word "serotonin" because it is from serotonin that Melatonin is produced.* Studying at night suppresses melatonin production, which disturbs the body's homeostasis (Čerňyšiov et al., 2014). According to D. Stravinskienė (2021), <...> serotonin is one of the neurotransmitters (neuro carriers) present in our body, which is involved in the transmission of nerve impulses between neurons. Serotonin is produced from the essential amino acid tryptophan, which our body receives through food. Most serotonin is produced in the intestine (about 95%), and the other part in certain brain structures (about 5%). Accordingly, it is divided into peripheral and central. The produced peripheral serotonin enters the blood - it is stored in platelets and combined with blood plasma proteins, metabolized in the liver and eliminated through the kidneys. In this way, the blood's free peripheral serotonin is regulated. Central serotonin is stored in certain presynaptic neurons in the brain. Peripheral serotonin produced in the intestine regulates intestinal motility, determines the absorption of glucose in the intestine, delays the action of insulin and, through certain mechanisms, regulates the function of the pancreas - the release of digestive enzymes. As it accumulates in platelets, it participates in blood

coagulation processes - it promotes the sticking of platelets, the contraction of blood vessels, and causes their spasms. *It acts as a certain growth factor, as it is a protein-derived substance that stimulates cell proliferation and promotes wound healing.* Serotonin stimulates the release of nitric oxide from vascular endothelial cells and thus dilates blood vessels. Central serotonin also regulates the flow of glucose into the brain to meet the energy needs of brain cells. At the same time, it affects our psycho-emotional state - it makes us feel happier, calmer, more focused, more emotionally stable, less anxious, and sleep better. It is essential to have a balance between central and peripheral serotonin. <...> The body's central and peripheral serotonin levels must be maintained at 5 and 95 per cent. When the brain produces too little serotonin, a person's self-esteem decreases, a sad mood prevails, apathy appears, it is more difficult to concentrate, memory deteriorates, which makes it more difficult to study/work, an individual is more sensitive to pain, insomnia most likely to appear, because the sleep hormone melatonin is not produced in the absence of serotonin. The need for simple carbohydrates also increases, and then weight increases. People with low self-esteem and who cannot adapt to the influence of various stressors tend to develop depression <...>. Serotonin production is stimulated by light through certain parts of the retina. Vitamin D produced in the sun increases the production of serotonin. <...> An important factor is physical activity, which supports physical and psycho-emotional well-being *because serotonin and other hormones are released during physical activity - dopamine (hormone of satisfaction) and euphoria -causing endorphins.* Another important factor is food, which stimulates the production of serotonin. It ensures a sufficient amount of tryptophan in the diet, which is obtained from protein-rich food - meat, fish, eggs, legumes, grains, seeds, nuts, and milk.

The importance/lack of physical activity is one of the main problems of the society of this age (Tannis, Senerat et al., 2019). The human body has a biological need to move, which is necessary to maintain the proper functioning of the human body. According to research, the physical activity of people today has decreased significantly, by 59 per cent. The population of the European Union is not physically active enough. The sedentary position is a health risk factor independent of the level of daily physical activity, provoking chronic non-infectious diseases and increasing the risk of early death. Even 90 per cent of sedentary workers have experienced symptoms of musculoskeletal disorders of varying intensity. A strong association between daily sitting time and physical frailty has been found. Therefore, it is necessary to reduce or limit sitting time if an individual wants to improve their well-being and daily lifestyle. During the Covid-19 pandemic, many

people complained of disorders caused by reduced metabolism, which happens precisely because of sedentary work and reduced physical activity (Ignatavičiūtė, Dadelienė, 2022). Reduced physical activity and prolonged sedentary work are associated with increased mortality (Ekelund, Tarp, et al., 2019; Stamatakis, Gale et al., 2019; Patterson, McNamara et al., 2018), decreased social connections, increased anxiety, isolation and with an increase in the feeling of loneliness, deterioration of mental health, and with a decrease in work productivity <...>. R. Kėvalas (2021) states that a lack of physical activity promotes postural disorders due to muscle weakness, deformation, and morphological body asymmetry. The consequences of little physical activity can accompany children for the rest of their lives. According to international studies, 34-50 per cent of children and adolescents worldwide are characterized by irregular posture. The incidence of postural disorders in Chinese children and adolescents is 65%. In Poland, the frequency of postural disorders is higher among obese children and adolescents and reaches as much as 74%. As the age of children increases, posture disorders are detected more often. *The cause of all acquired postural disorders is low physical activity, long-term sedentary work and bad posture that has become a habit. Maintaining correct posture requires strong, agile muscles that can easily adapt to the changing environment and position. However, without engaging in any physical activity, these muscles begin to disappear, they cannot maintain the correct spine position, and they begin to bend* (Niparavičienė, 2006). Thoracic kyphosis, one of the children's most common postural disorders, is related to children's habit of using computers/ICT 4 (four) or more hours a day. This posture disorder is caused by an irregular sitting position at the work desk, usually *slouching*. Thoracic kyphosis is more common in children who engage in physical activity once a week or less. Acquired spinal deformities account for 95 per cent. all postural disorders. 2020 of the Institute of Hygiene, according to the data, various posture disorders (lordosis, kyphosis, scoliosis posture) were identified in 19.52 thousand children per population. Scientist R. Kėvalas (2021) states that low physical activity, sitting for long periods, high-calorie foods, snacking, and abundant consumption of biologically inferior products also significantly influence obesity (up to 90%). Also, childhood obesity is associated with psychological problems - anxiety and depression, low self-esteem, poorer quality of life, and bullying. Experiencing stress and negative emotions is associated with a tendency to overeat and to choose more sugary foods. The main methods of treating obesity are nutritional correction, physical activity, not eating while watching TV, using smart devices or reading a book, *and regularly spending at least 60*

minutes actively per day or walking at least 10 thousand steps per day, limiting sitting at the computer (Kėvalas, 2021). Two stages of a child's life are distinguished, during which physical activity significantly decreases: when children start attending school and during adolescence (Steene-Johannessen et al., 2020). Puberty is an integral part of the human growth cycle. This period is very complex and can vary from person to person, and is characterized by changes in emotional, behavioural or brain activity, body, strength and appearance (Mendle et al., 2019). In Lithuanian schools, if the child/adolescent is not assigned a special education, all children play sports according to the same program. By comparing physical capacity indicators (balance, flexibility, leg and arm muscle strength, speed, dexterity, cardiovascular endurance) of adolescent schoolchildren who play sports and those who do not, it was found how the physical capacity indicators of adolescents differ depending on whether they engage in after-school activities additional sports activities or not (some organized sports training is attended at least 2-3 times a week). It was found that in all tests, the average test scores of students who played sports were better than those who did not play sports (INTERNATIONAL SCIENTIFIC CONFERENCE, 2022).

Importance of sleep/impact on children's health. Even before the pandemic, it was established that the sleep duration of Lithuanian children was insufficient. In a 2016 study, it was observed that only 8 per cent of children sleep enough. The trend of shorter sleep is found worldwide and is associated with the increasing use of information technologies in everyday life (Jusienė et al., 2021). In Lithuania, this is associated with schoolchildren's workload/anxiety, especially with assigned homework. *Studies show that most students do homework until late, even midnight when it's time for a deep sleep.* Loud neuroscientist and sleep expert Walker, 2020, claims that limiting sleep duration in developed countries affects health, life expectancy, safety, productivity and especially children's learning. Sleep is one of the most important phenomena in life. Sleep enriches many brain functions, including learning, remembering, and making logical decisions. It recalibrates our emotions, strengthens the immune system, harmonizes metabolism and regulates appetite. People do not just sleep but experience two different phases of sleep. Scientists have named them according to eyeball activity: NREM, or low-eyeball-activity sleep, and REM, or high-eyeball-activity sleep. The phase of REM sleep, during which the brain is almost as active as when awake, is closely related to the experience we call dreams and is therefore also called the dream phase. Dreams create a space of virtual reality where the brain combines past and present knowledge and generates creativity. The NREM phase is divided into four more separate periods, during which sleep becomes more

solid. The two sleep phases, NREM and REM, compete tirelessly throughout the night for the decisive influence on the brain. The NREM sleep phase first controls the brain, followed by REM sleep. *An unbalanced diet and a carbohydrate-only diet lead to a lack of protein, and by preventing the brain from experiencing deep NREM (most of the first half of the night) or REM (second half of the night) sleep, both of which have essential but different functions in the brain and body, there are many physical and mental health problems.* The difference between infant, child and adult sleep is the number of its phases. Adults typically have a continuous, monophasic sleep pattern, while infants and children have polyphasic sleep patterns, with many short sleep fragments per day. REM sleep in the early stages of human life is not optional but mandatory. As the baby grows, his sleep periods become more stable and longer, and their number decreases. *The daily rhythm determines this change, it is also called the circadian rhythm. Everyone has it* (Latin *circa* means "around", Latin *diem* - "day"). The internal twenty-four-hour clock in our brain transmits its daily circadian rhythm signal to all other areas of the brain and every organ in the body. The circadian cycle determines when we want to be awake and when we sleep, and it also regulates other regular processes in the body, including when we eat and drink, our emotions and mood, the amount of urine we produce, our body temperature, our metabolic rate, and the production of many hormones. A six-month-old baby sleeps fourteen hours a day, and NREM and REM sleep phases share this time equally. A five-year-old child sleeps eleven hours a day, and NREM sleep accounts for 70 per cent of that time, while REM sleep accounts for only 30 per cent. In late adolescence, the ratio of 80 per cent and 20 per cent NREM to REM sleep settles and remains this way throughout a person's youth until reaching middle age. As childhood ends and adolescence begins, the influence of deep NREM sleep becomes stronger. The intensity of NREM sleep increases during middle and late childhood, peaks before puberty and then declines. *The NREM sleep that occurs during this transitional period of life is exceptional.* The formative effect of deep NREM sleep is becoming increasingly felt. Among the many functions attributed to deep NREM sleep, adolescents' thinking is not as rational as that of adults; they are more inclined to take risks, and their ability to make decisions is relatively poor. As the brain matures, and children often have a difficult transition from adolescence to adulthood, the intensity of deep sleep changes, which helps to overcome the difficulties of adolescence and later safely enter the realms of adulthood. In the study of the maturing brain, the neuroscientific equivalent of nature photographs taken at different times was created, in which a tree is captured in spring with its buds (infancy), then with its leaves in summer (late childhood), even

later with its mature and lush green leaves (early adolescence), and finally with the arrival during winter shedding of leaves (end of adolescence/beginning of adulthood). In the Universal Lithuanian Encyclopedia (2023), it is stated that *an age stage*, a stage of human physical and mental development, with approximate duration limits: infancy (0-2 years), early childhood (2-6 years), middle childhood (7-11 years), adolescence (early 11-16 years old, late (about 16-19 years old), young adult (about 20-40 years old)). The nine-year-old (twelve-year-old's) circadian rhythm is such that the child, partially influenced by the rising wave of Melatonin common to all his peers at that time, falls asleep (or should) around the twenty-first (second) hour. During adolescence <...> cognitive abilities and logical and critical thinking strengthen. Changes in deep NREM sleep always precede later stages of cognitive development in the brain by several weeks or months, clearly indicating the nature of the causal relationship: *deep sleep is likely the driver of brain maturation, not the other way around*. When studying the intensity of deep sleep in the brain, it is established that the maturation curve is first visible in the posterior part of the brain, which is responsible for visual and spatial perception. Then, it spreads evenly to the front of the brain in the later stages of adolescence. The last stop on the puberty journey is the part of the frontal lobe that regulates rational thinking and decision-making. Thus, the back part of the adolescent brain was more like an adult, while the front part remained childlike throughout this stage of development. *Teenagers develop rational thinking late, as the part of the brain responsible for this ability is the last to feel sleep's healing and maturational effects*. Sleep is not the only factor in the development of the brain, but it is essential because it creates the conditions for the formation of mature and logical thinking. By recognizing that deep NREM sleep is essential for teenagers, we will not only understand what normal brain development is, but we will also begin to understand what happens when processes do not go as they should and we are faced with abnormal brain development. Most common mental illnesses, such as depression, are now considered medical disorders caused by abnormal development. Sleep enhances various brain functions, such as our ability to learn, remember, and make logical and rational choices. By positively affecting our mental health, sleep rewires our brain's emotional connections and allows us to face social and psychological challenges with calmness and composure the next day. Sleep in our body replenishes the defensive arsenal of the immune system, prevents infections and protects against various diseases. It balances the ratio of insulin and glucose circulating in the blood while restoring normal metabolism in the body. Sleep regulates appetite and helps maintain healthy body weight by encouraging healthy food choices rather than giving in to impulsive eating. A good

microbiome is formed in the body during long sleep. Unfortunately, our society and parents' attitudes do not allow us to appreciate and recognize that teenagers need more sleep than adults. A. Room (2022) also claims that sleep is a necessary pause at the end of the day. An adult needs seven to nine hours of good sleep every night. If a person sleeps less than seven hours a night, the desire for sweets increases. A regular sleep-wake schedule where you wake up and go to bed around the same time is critical. It would be best to wake up around 7 am and go to bed around 10 am. According to Taylor (2021), an 8- to 11-year-old student (especially during adolescence/puberty) should be *getting 9 to 11 hours of sleep per night*. An increased need for sleep is a normal part of puberty. During puberty, the body has important tasks, such as growth spurts (bones grow most during sleep), hormone production and the growth of completely new body parts (breasts in girls), and emotional changes. This is a huge work for the body, so it needs energy. One of the best ways to ensure that the brain and bodywork as well as possible is to provide them with quality sleep. Sport/movement is also impossible without quality sleep. After all, sport helps the brain to produce the "hormone of happiness" - serotonin.

Research shows that all schoolchildren often feel sleepy in the afternoon (around 12–2 pm) for several reasons: 1) they go to bed late, they do not get enough sleep - they do not get enough sleep for a teenager/student: at least 8/9-10/11 hours.; 2) due to decreased blood glucose concentration, usually after not eating enough at lunch or not eating breakfast at all. Most schoolchildren do not eat in the morning because they do not have time or do not want to, because they are worried before classes (mostly elementary grades, especially fifth/sixth graders). Glucose concentration also decreases when much glucose or simple carbohydrates are eaten during lunch (students give in to impulsive eating). Instead of carbohydrates, it is better to eat a protein snack; 3) Lack of fluids - drinking little water (lack of awareness and skills); 4) Does not move much - often sits on mobile phones during long two/three/four (20 min.) breaks and "sits down" with 6/7 lessons.

II. RESEARCH ORGANIZATION AND RESULTS

To find out the problems of the teaching/learning workload and the *compliance of the workload with the healthy daily routine of the student, the age group (class), the compliance of the load with "safe" learning and maintaining health/healthnervous system and personality development*, from 2016 to 2023, a *long-term study was conducted using various methodologies (by rotation): survey/interviews of students, teachers, parents, "Interviews", various "Case Analysis", "Amount of homework assigned by various schools/ analysis of complexity in electronic diary" and analysis of class time*

and breaks in school timetables. In 2020 - 2023, with the help of parents, the amount and complexity of homework were studied and recorded by teachers in electronic diaries. The amount/complexity of homework in 10 public part-time schools (Lithuanian and ethnic minorities) was investigated, and more than 1,000 students and parents were interviewed. The study included grades 1-10 students and their parents from different Lithuanian schools.

The research identified the current/defective mode of the schoolchild's day contrary to the student's healthy development. Most of the schoolchildren lack time for extracurricular activities/informal education/hobbies (now 10%), time in the family, communication (reflection of the day/expression of emotions, feelings) (now 10%), and time outdoors/in nature. Most of the time - about 7 hours (50%) is devoted to lessons because lessons start at 8 or 9 am, end at 3 pm or 4 pm, and in rare cases, at 2 pm. About 3/5 hours

(30%), less often 2 hours, are allocated to homework. The amount and complexity of homework do not correspond to the age of the children.

In most cases, a student, even in primary and basic education, has 4-5-6 subject(s) assignments for the next day (rarely 2-3(s) subjects). Homework for one subject usually involves multiple tasks/multiple methods (reading, writing, retelling/retelling and memorization), so one subject often turns into "multiple subjects" and takes much time to complete. There is much stress on the child's growing personality because every child wants to do everything on time and remain positively evaluated. As a result of such a lifestyle/tempo, the daily routine, emotional state/physical health/sleep/self-confidence/self-awareness/healthy development are disturbed, more negative grades appear, motivation to study and the desire to attend school disappear, and the student's values change. The number of children with special needs is increasing.

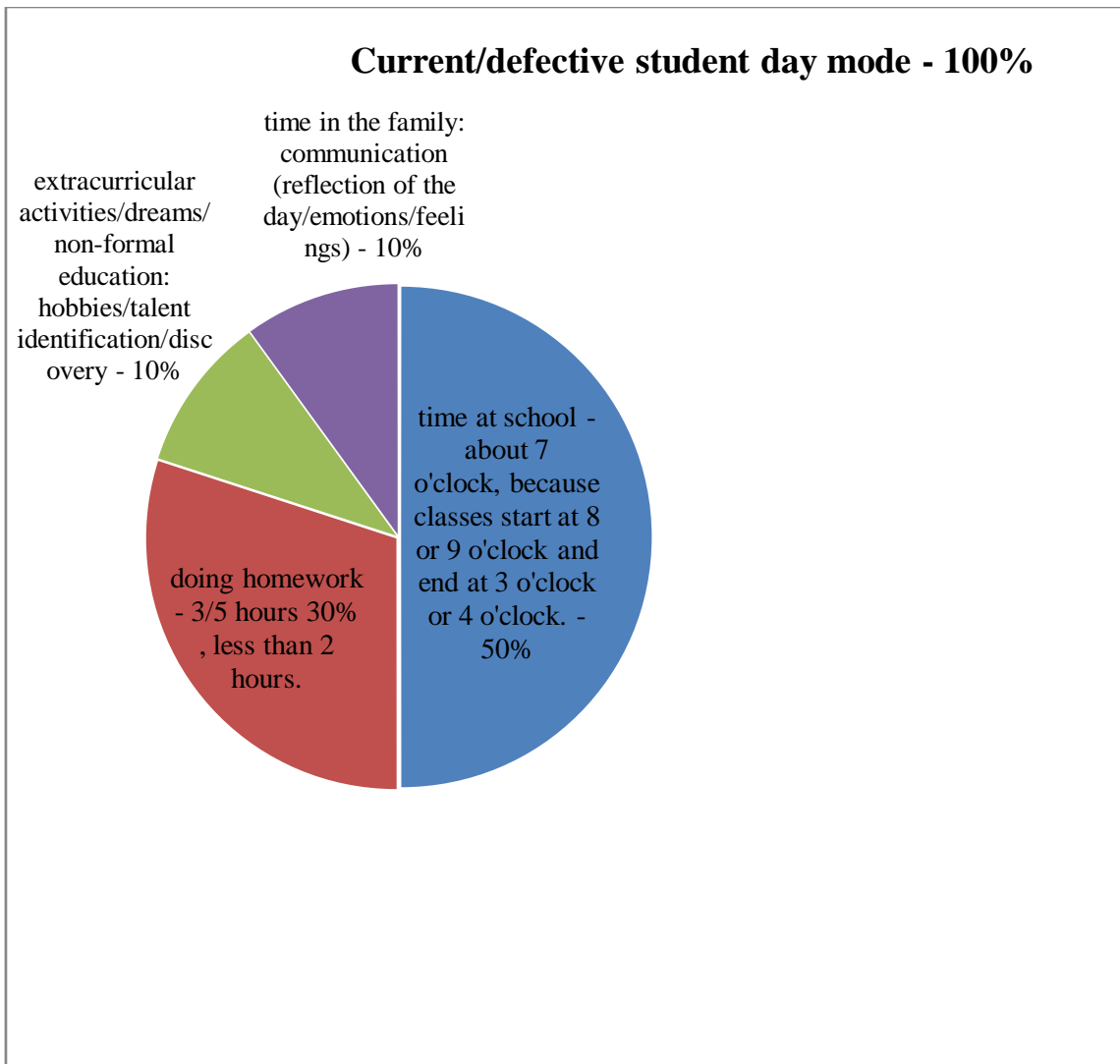


Figure 1: Distribution of answers to the question "How much time do you spend on homework, extracurricular activities/hobbies, family communication/daily reflection, lessons at school/gymnasium and being in nature/outdoors?", %.

More than ten years ago now, the links between learning load and students' psycho-emotional well-being have been established: students consider the load as too high, they feel tension at school more often, their motivation to learn is weaker, they rate the school as an institution more poorly, they feel a greater fear of teachers and students, general students' mood is more often nervous. Excessive study load harms physical and mental health, elements of daily routine, sleep, physical activity, and extracurricular activities/dreams. However, it was not possible to adjust the training workload until 2023.

The conducted study proved that the current teaching load of Lithuanian students is not compatible

with reality/students' physical and mental abilities/ability to respond to/maintain the implementation of educational programs, contradicts the implementation of a healthy daily routine for students, does not meet hygiene standards, and they also require a human/logical correction. The hygiene standards for the preparation of the school education plan have been determined- LITHUANIAN HYGIENE NORM HN 21:2017 must be helpful for the student, allow to educate/teach students within their capabilities as children, not to increase, but to shorten their working/studying time at school.

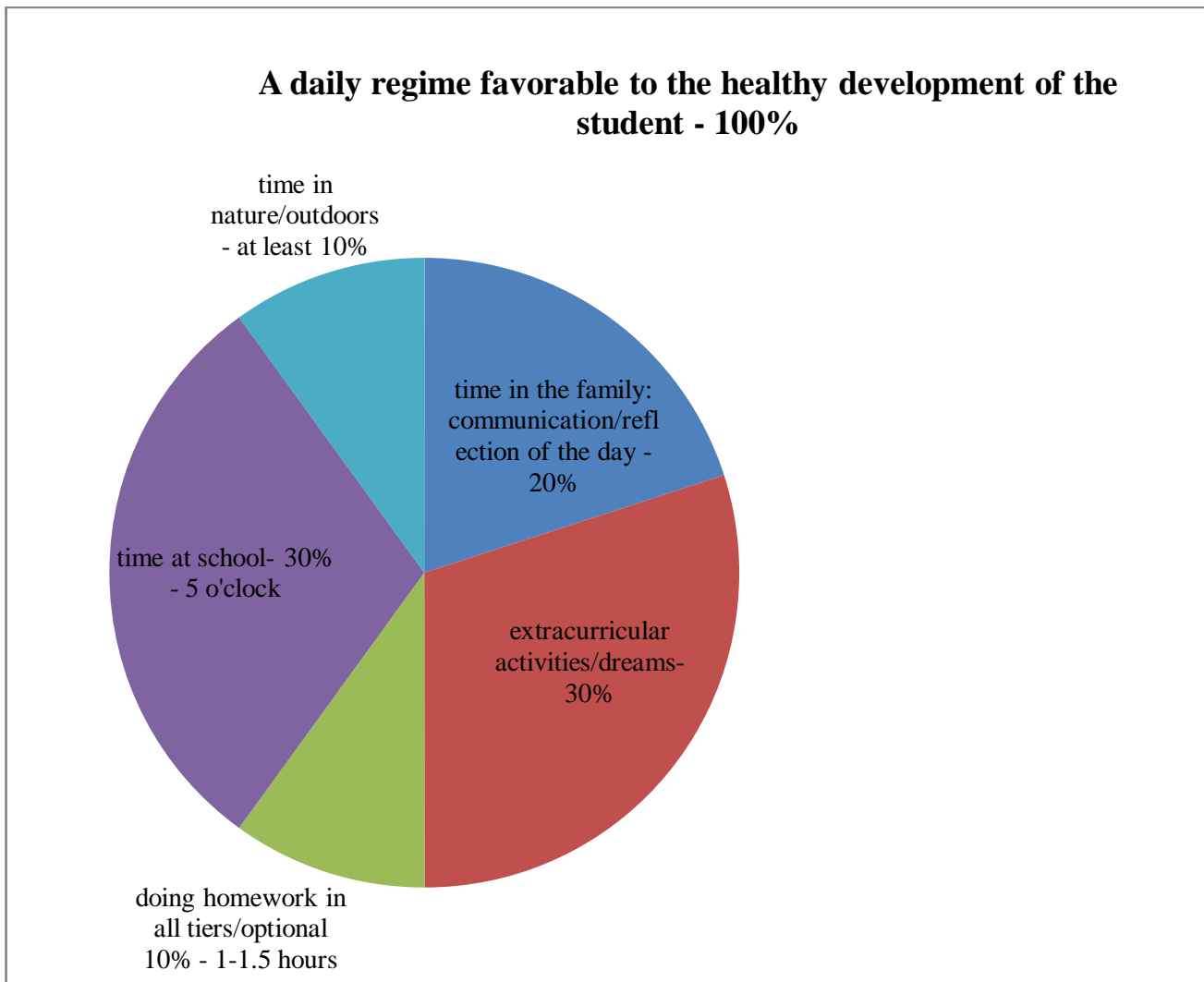


Figure 2: Daily mode/rhythm distribution favourable for the healthy development of the schoolchild, %.

The Most Important Conclusions - In Brief

3 (Three) Factors Influencing The Healthy Development Of A Student's Personality, Successful Learning And Achievements: 1) Subject Content, 2) Adequate/Real Course Workload, 3) Values-Based Science - Tolerance Of Female And Masculine Gender Nature.

- SUBJECT CONTENT (valuable for life-understand able-not overloaded);
- ADEQUATE/REAL/NOT OVERLOADED TRAINING LOAD (positive methodology/didactics in all subjects; observance of scientific hygiene - the same mandatory number of hours of training is

established for all schools regardless of nationality; the lesson schedule is tightened within the student's "working" hours, taking into account the student's age characteristics/opportunities for him to feel emotionally safe as he grows up; provide an opportunity to have a rational-undisturbed daily routine and sleep; clear-short "biting" homework or none; as a priority quality, but not quantity-based education);

- VALUE-BASED SCIENCE - TOLERANCE OF THE NATURE OF GENDER (to take into account the natural different education of boys/youths and girls/girls (their biology-physiology/psychology), not to "separate" morally, but to separate them when learning/educating in certain subjects, thus focusing on standard education (si), by tolerating the natural characteristics of both sexes, allow the girl to develop and develop in a girlish way fully, the boy in a boyish way, as a healthy personality. Emphasize the creation of a traditional family as a societal norm).

III. CONCLUSIONS

1. *The motivation to learn in all subjects is reduced not only by the fact that the "nature" and differences in learning between boys and girls are not taken into account but also by the disproportionate distribution of the learning workload according to the age of the children.* Homework is asked equally in primary and basic (secondary) schools. It is evaluated equally in primary and basic (secondary) schools. It violates the rule that grades are not used in elementary school. Homework for one subject usually involves several methods (reading, writing, memorization), so one subject sometimes turns into "multiple subjects" and takes much time to complete. The norms of learning hygiene (Article 40 of the Education Law) corresponding to a healthy lifestyle and a child's healthy development should be remembered. *Therefore, there is much stress on the child's growing personality—a lack of positive evaluation. Lack of understanding of cumulative assessment (large-scale works remain completely or positively not assessed), improperly practised by teachers. Consequence: The child does much work, and the result/reward is "underestimation".*
2. *Practice shows that the workload of training is understood as the student's presence/teaching at school, the duration of the lesson, the duration of breaks, the performance/duration of homework, as this is the activity/task assigned during the lesson and is inseparable from the training) part, so it counts towards the school/teaching workload. So it can be said that students work at school for about 7 hours, plus less often 2 hours at home, more often 3-4 hours with assigned homework, the total workload is about 9-10 or more hours, the rest of the time is for extracurricular activities, family communication, nutrition/meals and sleep.*
3. The conducted research identified the current/defective mode of the schoolchild's day contrary to the student's healthy development. Most of the schoolchildren lack time for extracurricular activities/informal education/hobbies (now 10%), time in the family, communication (reflection of the day/expression of emotions, feelings) (now 10%), and time outdoors/in nature. Most of the time - about 7 hours (50%) is devoted to lessons because lessons start at 8 or 9 am, end at 3 or 4 pm, and in rare cases, at 2 pm. About 3/5 hours (30%), less often 2 hours, are allocated to homework.
4. After analyzing the teaching/learning workload, it can be said that the change in the education system should start with the distribution of the student's workload during the day, the daily planning/regime and only then analyze the programs (overloaded with unnecessary information, lacking life skills development), methodology/didactics and teachers' work.
5. The student's lesson schedule should be made to correspond to the student's healthy lifestyle - "the student's study hours should not exceed the working hours of adults". The student should not feel imprisoned by education.
6. To stop forming in students a "fear" attitude towards science, that from the first grade, they are being prepared for exams in the twelfth grade.
7. When renewing/changing the general programs of Lithuania, *consider the age of schoolchildren and abandon homework. In educational subjects, it is important not to increase but to reduce the training load because UTA exceeds students' capabilities as children, demanding too much of what they must be able to do at the end of primary, basic/and secondary education. To take into account the psychological characteristics of the adolescent period, to emphasize the transition from primary to primary school, which coincides with the transition period from junior school age to adolescence (11-12 years old), during which significant physical, psychological and social changes.*
8. It is essential for children's well-being to adjust the minimum number of lessons per student per week in the updated curricula (UTA), which were also in the "old" ones (2008) so that it is the same in all schools and those where teaching in the language of the national minority is legalized. For example, fifth graders have five (5th) extra hours/lessons. *It is just another working day for a student, but there are seven days a week, two of which are for the student's mental and physical rest. This seriously disrupts the daily routine. More lessons, more homework, a heavier child's backpack (some fifth/sixth graders*

- reach 5/7 kg), classes end late (around 3–4 pm, less often 2 pm), sleep late, parents restrict extracurricular activities, chronic fatigue appears, immunity weakens, joy in life is lacking, because children feel imprisoned by science. Then there is a feeling of inferiority and a feeling of hating school, not attending it, and quarrels arise in families, misunderstanding each other because some parents think that their child cannot study, while others "press" them to be able to.
9. Research shows that "stressed education" takes place due to heavy workload and inadequate methodology, and as a result of education, gifted children become special needs.
 10. During the pandemic, many parents saw a natural "system/life science/education" in which our children "exist". The excuse that the "pandemic" caused such a heavy burden on children is meaningless. Paradoxically, the "pandemic" only highlighted and showed all the shortcomings of the Lithuanian education system and especially showed the enormous workload our children work, which is why it was challenging to teach children because basic science "relies" on homework and about 50% students master basic knowledge with the help of tutors.
 11. Surveys of parents show that the number of children with spinal problems is increasing. All acquired posture disorders are caused by low physical activity, prolonged sitting, and bad posture that has become a habit. Maintaining correct posture requires strong, agile muscles that adapt quickly to the changing environment and position. However, without engaging in any physical activity, these muscles begin to atrophy, are unable to maintain the correct position of the spine and begin to bend.
 12. Studies show that schoolchildren often feel sleepy in the afternoon (around 12–2 pm) for several reasons:
 - 1) They go to bed late, do not get enough sleep - they do not get enough sleep for a teenager/student: sleep at least 8/9-10/11 hours. ;
 - 2) due to decreased blood glucose concentration, usually after not eating enough at lunch or breakfast. Most schoolchildren do not eat in the morning because they do not have time or do not want to, because they are worried before classes (mostly the main links, especially fifth/sixth graders). Glucose concentration also decreases when much glucose or simple carbohydrates are eaten during lunch (students give in to impulsive eating). Instead of carbohydrates, it is better to eat a protein snack;
 - 3) Lack of fluids - drinking little water (lack of skills);
 - 4) Does not move much - often sits on mobile phones during long two/three/four (20 min.) breaks and/or "sits down" with 6/7 lessons.
 13. The causes of excessive learning load and its links with students' health have been identified:
 - incompatibility of educational documents: the general education plan offers too many points/subpoints that mislead schools/gymnasiums, as a result of which the plan can become a formality rather than a practical implementation; make the school education plan clear/concise, so as not to confuse school communities with "set" references, describe it in such a way that it can be immediately applied to each school/gymnasium; general programs are overloaded with unnecessary information that does not apply to life, lack of information necessary for life/lifestyle, so that every child can acquire solid "life" basics and feel emotionally safe while learning.
 14. The conducted study proved that the current workload of education of Lithuanian students is not compatible with reality/students' physical and mental abilities/ability to respond to/maintain the implementation of educational programs, contradicts the student's healthy daily routine, healthy development, does not correspond to hygiene norms, and it also requires human/logical correction. The hygiene standards for the preparation of the school education plan have been determined- LITHUANIAN HYGIENE NORM HN 21:2017 must be helpful in the student, allow to educate/teach students without exceeding their capabilities as children, make it possible to have a rational daily regime, not to increase, but to shorten their working/learning time at school. Therefore, reorganizing the learning load's hygiene norms is essential.
 15. Review the aspects of the student's lifestyle - study and recreation mode, to devote time to yourself/extracurricular activities/clubs. It is necessary to help regulate the sleep regime of the schoolchild - go to bed at "child's" time and sleep for an average of 8-10 hours, taking into account the period of adolescence when the body requires more sleep of 9-11 hours. Quality/healthy sleep stimulates the production of Melatonin and the "mood hormone" serotonin. A student/parent survey shows that few students get that many hours of sleep, which they say is one of the reasons they "stay up late doing homework because there is a lot of it." It is advised not to use the computer or other smart devices before bed. All this contributes to reducing the body's overall stress level and strengthening the student's health and healthy development.
 16. There are facts that those "scientists" and pioneers to whom the whole class is compared are usually children engaged in one scientific activity, under much pressure from their parents, usually no additional education (clubs) and physically weaker - this is one group of susceptible children, as if "trained" only for victories. It is sad, but we educate

- and raise a generation of very vulnerable perfectionists.
17. Moderate use of ICT (information and communication technologies) during lessons, considering permissible ICT hygiene norms. Pay special attention to mobile phones, which are boldly used (during online and contact learning) for educational purposes in all classes, regardless of children's age, health, capabilities and knowledge. Mobile phones emit negative radiation, and the dependence of schoolchildren on this means of communication and communication is increasing. Allow the phone to be used only for its intended purpose and outside class.
 18. The critical role of teachers is delicacy clear and reasonable requirements that correspond to students' abilities. It is necessary to notice the minor achievements of the child to praise him for his merits and work. Assessment should promote personal development, positive self-awareness and self-motivation to learn—lots of positive reviews. Abandon the "students evaluate each other" methodology, which disrupts the creation of friendly relations and the socialization of students—a commendable method of self-assessment. "Experimental projects" with teenagers, where any negative evaluation exists, disrupt their perception of the world because it affects their feelings. Abandon "answering at the blackboard" because when standing in front of the class, children are more vulnerable; let them answer at their desks and of their own volition
 19. No extra diplomas for the first ones at the end of a specific trimester class because all children strive and are different, some go unappreciated, and most importantly, everyone is valuable. It must be remembered that many children remain "missed" without proper methodology. Therefore, it is unfair to notice and highlight only the prime movers. It is an "absolute defeat" in terms of education.
 20. Olympiad tasks in all subjects must be created purposefully for the age group and class of students, considering the subject programs. For teachers not to teach students "in advance" because children's brain circuits have a certain period of maturation and are psychologically unprepared for information and load not according to their age.
 21. Establish a separate position for a class teacher so that there is no personal interest. Research shows that most classroom teachers experience "teacher burnout." The teacher-educator must not teach a single subject in the class so that the children do not feel pressured as a class teacher or subject teacher. The tutor would perform the following functions: monitoring lessons, adaptation of the student in the new school; adaptation of the student when returning after the vacation (some students/ talented and healthy have difficulty socializing, mainly primary and basic grades 5-8 often feel anxiety when returning after the vacation; getting to know the character/characteristics of the student as a person; would take care of the student if needed at school, in a spiritual/emotional sense (observe/ implement/encourage positive communication with classmates, creating a family-like classroom community/atmosphere); encourage the formation of healthy eating skills (eating slowly and without food so that the child does not starve); organize excursions/outings gradually moving from smaller to more considerable distances, when traveling by bus, but as a priority would promote getting to know one's city, routes, then other cities of Lithuania (citizenship education); would communicate with teachers and business people on issues of concern to students/mediate; would communicate with parents, helping to adjust the student's agenda, would encourage extracurricular activities/revealing and educating the child's talent, aptitudes/fulfillment of dreams, taking into account the characteristics of the child's age; would know and understand the peculiarities of school age development (early, middle, late adolescence/sex education and emotional maturation issues); I educate parents/ lecturers by observing each child as an individual; would promote positive human spiritual/emotional growth and becoming a happy personality.
 22. In schools, implement a positive program for developing reading and writing skills (without evaluation by grades), which would improve students' reading comprehension and writing skills and the quality of education. Inform parents about the benefits of reading and encourage them to read with their children at different ages. Implement *the recommended evening reading of a fairy tale to a child before bedtime (for the child's positive development)* as an example. Yes, at any age, it is easier for a child to explain/reflect certain of his feelings/emotions and describe actions at an essential stage of his development.
 23. During the excursion, for the sake of psychological safety and socialization, students must be allowed to use the toilet, especially when travelling by bus outside the city limits. There are facts that even if there is a toilet on the bus, it is not allowed to use it or it is suggested not to use it, so after such excursions, students have health problems.
 24. There is a lack of time to implement the educational content fully (teachers are burdened with "unnecessary" activities), methodological materials, information dissemination, and insufficient material base and funding.
 25. Today's teacher has daily contingencies: "nerves". A teacher cannot create high-quality lessons, having

to teach his subject and also participate in various projects, seminars, exhibitions, integrate into other subjects, share experiences, organize excursions and presentations, "collect evidence of his work", constantly meet qualifications/raise qualifications and still "sit" at school overtime, when his brain has to rest in the family, and the next day he has to come to work devoting himself to pedagogy. The modern teacher works like a robot, and something is constantly demanded of him. The wisdom and calmness of teachers of a respectable age educate children much more than ICT - that needs to be understood and respected. Training seminars will not help; the best Lithuanian teachers who are teachers by nature "disappear" (leave their jobs) because both the teacher and the student are human and have "limited" opportunities for work and rest.

26. As a priority in the scale of values, encourage students and teachers not to compete/envy each other but to develop a safe/positive value/emotional skill in themselves - to rejoice/sympathize with each other's success/failure while communicating willingly to develop respectful human/empathetic mutual relations.
27. When fifth-graders move from the fourth to the fifth grade, allocate all the mandatory school years for adaptation and do not evaluate their achievements with grades or "find" only positive (4/5 in the five-point system, some foreign countries practice such a system perfectly) grades for effort/knowledge. The transition "to grades" must be gradual. Research shows that some elementary schools do not grade students' effort/knowledge but often convert their achievement to a verbal grade. However, emotionally more substantial and more self-confident, smiling/positive more often, more open to communication, more successful in socializing at school and more advanced in science are the students of those schools where evaluation by grades in primary school does not exist either verbally or in writing. A positive evaluation system with grades without negative evaluations is gradually introduced in the sixth grade. The level of their knowledge, encouraged by teachers during lessons, students learn by helping/lecturing each other, thus creating friendly/empathetic/human values-based mutual relations. The classroom creates a "family" community/atmosphere without competition for knowledge or grades. In the seventh grade, a 10-point grading system was introduced. At all levels and for all subjects (apart from physical education, music, ethics, religion, and moral education), Leiner's methodology (materials, visuals, kinesthetics) is perfect for teaching.
28. Research shows that only about 30 per cent attend school in June. Schoolchildren are significantly less

productive than usual - their bodies require rest. It is essential to return the holidays to all Lithuanian schoolchildren from the end of May.

29. It has been proven that most of the common mental illnesses like depression are now considered to be health disorders caused by abnormal development. Since a defective daily schedule due to an inadequate learning load promotes the emergence of children with special needs, it is therefore imperative to create and legitimize a teaching workload that is proportional to the children's age and is favourable for the healthy development of the student, and a rational daily schedule that will allow preserving the physical and mental health/development of children and training motivation.

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