Study of the development of running, jumping skills in 6-year-old students ***(****A futás, ugrás készségek fejlettségének vizsgálata 6 éves tanulóknál)* – diploma thesis 2019

Graduate student: Kovács Barbara
Scientific leader: dr. Boros-Balint Iuliana, associate professor

Abstract: The main reason I chose this topic was to find an answer for a question quite important for me, that is, how children can develop in the present lifestyle environment and what physical level are they on. As a young adult of this society, I felt an urge to be able to work out a series of solutions based on these answers and later on to apply them to help my work or that of other colleagues, who, in their turn, can also help in finding a solution. 49 children participated in the research: 21 girls and 28 boys, aged 6-7 from the preparatory class of the Apaczai Csere Janos School. The children participate at two physical education classes a week. The two measurements were carried out in two different semesters. As a result of the research, I reached the conclusion that the tasks requiring special techniques and the motric skills show significant deviation, which indicates that the children did not have enough time to acquire the techniques in the period between the first and second measurement, or to correct the faults. This proves that a lot more hours of physical education are needed in order to acquire these accordingly.

Investigation of changes in body composition is 6 years old for students ***(****A testösszetétel változásának vizsgálata 6 éves tanulóknál)* - – diploma thesis 2019

Graduate student: Miklós Csenge
Scientific leader: dr. Boros-Balint Iuliana, associate professor

Abstract: The topic of my thesis paper is examining the changes in body composition of students at the age of six. I took part in a project led by the teacher called Boros-Balint Iuliana in Apácai Csere János High School, Kolozsvár. This participation made it possible for me that I could deal with this topic also in my thesis paper. The purpose of the paper is studying the changes in the body composition of schoolchildren at preparatory school having Phisical Education classes twice a week. Three classes took part in the measurements, both boys and girls. The measurements were done at school time with the help of the physical education teachers. I measured forty-six students. The mensuration was done twice. The first was conducted in November 2018 and the second one in April 2019. While I was performing the measurements I used the OMRON BF511 measuring device which analyzes the body composition. I recorded six data in a table which are the following: height, weight, body mass index, body fat, skeletal muscle, resting metabolism. In my thesis paper I compared the results by various groupings. In the first part I compared the averages, in the second the differences between the boys and the girls and finally in the third part I compared the differences between the three classes, so class A with class B, class A with class C and class B with class C was compared as well. The comparisons proved that there are no differences between boys and girls at this age. However, between the first and the second measurement there was a spectacular difference because at this age little schoolchildren grow quickly. They can be with several centimeters taller during a few months thus their weight also varies as well as the other values. There was no significant difference between the classes, I received equal values with less variation. In my opinion, increasing the number of physical education classes we can achieve more positive and spectacular results in the growth of children and it can be an influential factor for the health and development of children as well.

Study of the development of throwing and catching skills at 6 year old children's ***(****A dobás és fogás készségek fejlettségének vizsgálata 6 éves tanulóknál)* – diploma thesis

Graduate student: Orbán Anita
Scientific leader: dr. Boros-Balint Iuliana, associate professor

Abstract: Exercising is a fundamental part of our everyday lives. While in school pupils are taught how to exercise correctly and it gives them confidence and also the ability to play in team. We need to monitor the children's development over the years in order to improve the standards of education for the following generations. The topic that I chose is studying the skills of throwing and catching for six-year old children. The test includes twelve probes that analyses them in different ways. With the help of these surveys I could learn a lot about the children's levels of skill and also the particularities of the children at that age. On of the most important conclusions that I drew is that children are able to develop by practicing and by the help of professionals. The result of these surveys clearly shows that children go through a significant change over the time among the first and the second round of supervision. Therefore I believe we don't have enough physical education in school, the duration and number of classes are not enough to learn these skills correctly. It would be useful to increase the number of classes up to three at least instead of the two weekly. It also turned out that there are some differences among genders respectively motor abilities. I can state that exercises are very effective. Physical training plays a significant role in the children's development. In conclusion I think I received accurate results for me researches and I could get a better inside view of the skills of six-year old children and the development of them. At the same time I gained a lot of pieces of information about this topic which can be used by teachers in the future so their work can be easier and more effective.

Assessment and monitoring of motor development of children aged 6-7 years using the TGMD-2 test (Evaluarea și monitorizarea dezvoltării motrice a copiilor de 6-7 ani cu ajutorul testului TGMD-2) **–** diploma thesis 2019

Graduate student: Nicoară Ioana
Scientific leader: dr. Deak Graţiela F., lecturer

ABSTRACT. Introduction: Physical education lessons influence children's motor development. The purpose of this study was to evaluate and monitor the motor development of pupils aged 6-7 years, enrolled in three preparatory classes for a period of three semesters school. **Materials and methods:** Data were collected from a group of 55 preschoolers enrolled in the preparatory class, aged 6-7 years, tested in two consecutive school years between October 2018 - December 2019, at the Theoretical High School "Onisifor Ghibu" in Cluj -Napoca, Cluj County, Romania. This study was carried out under the auspices of the European Community, the EFOP-5.2.2-17-2017-00035 project, and involved a Slovak-Romanian-Hungarian collaboration and five partner universities. The first part of the study consisted of completing the KidScreen-27 questionnaire by parents and their children who participated in the study. The second part of the study consisted in assessing children's motor development using the Test of Gross Motor Development (TGMD-2) system, measurements that took place during physical education classes. TGMD-2 consists of simple tasks such as throwing, hitting, catching, and rolling a ball to measure movement coordination (Ulrich, 2000). The third part of the study consisted in determining the body composition of children (percentage of adipose tissue and percentage of muscle tissue) using the OMRON BF-511 (body composition analyzer). **Results:** Following the application of the student t test, the results obtained indicate significant increases in scores in the case of locomotor subtest tests, significant increases in the case of a single sample in the control subtest of an object - hitting a ball, significant decreases in the case of tests - catching a ball and rolling a ball in the subtest control of an object, a significant improvement in basic motor skills - running and jumping, and lack of progress in basic motor skills - throwing and catching. **Conclusions:** The time allocated to physical education classes in Romania may be an explanation for the decrease or stagnation of children's gross motor development in certain motor skills.