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Ph.D. Thesis

MODEL OF DIDACTIC DESIGN AND IMPLEMENTATION OF AIKIDO PROGRAMS AT YOUNG SCHOOLCHILDREN (8 to 10 YEARS OLD)

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THE FIRST PART THEORETICAL CONCEPTS COMPRISED IN THE PROBLEMS OF THE THESIS

Cuvinte cheie: curricula scolare, programe scolare de educatie fizica, activitate fizica, aikido, perfectionarea calitatilor mortice la copii de 8-10 ani.

THE 1st CHAPTER INTRODUCTION IN THE PROBLEMS OF THE PAPER

1.1. **Argumentation**

Throughout the world the state policies that promote the education try to identify the most appropriate ways of promoting some „curricula" that would bring the so much expected improvements of the content and means of taking action within the lessons of physical education.

1.2.1. **Education curriculum**

The methodology concerning the elaboration and approval of the school curriculum – framework education plans and school programs from the 18th of June 2014 (valid from 2nd of July 2014), regulates the procedure of foundation, elaboration, assessment, approval and acceptance of the framework education programs and school programs as component parts of the national curriculum. The Ministry of National Education through the National Agency for Curriculum and Assessment regulates the content of the Education Curriculum.

The Law of National Education, article 1/2011, establishes paths and directions concerning the manner of organization of the activity of class teaching, all the activities being stipulated by the organic law that comprises the next approach direction having the specific objective *balancing the requests of intellectual nature with the mental-movement and playful ones.*

Likewise, the curriculum standards of performance are provided at the end of the paper and they offer the necessary guidelines for constituting the performance descriptors in order to assess the results of learning by the end of the Elementary, Middle or High School education (Curriculum).

1.2.2. **Sports Activity – part of the education curriculum**

In the case of sports activities organized by the class of students (within the extra-curriculum activities) their choosing, content remain, most of the times, at the preference of the teacher. It is he or she who selects, seeks to identify the most accessible paths of implementation of theses sports activities in class, ensuring, in the first place the safety of the students, as well as the attractiveness of these in sports activities.

The complexity of the sports activities developed in a school unit can be increased only under the conditions in which the equipment existing in the school allows it and the safety conditions for the students are ensured according to the valid regulations.

We considered that the implementation within the program of diversification of the offer of physical activity to children with a young age, that of 8 to 10 years old of a branch of martial arts, namely Aikido would complete favorable elements that would justify this research theme, this argument constituting in fact the final purpose of our paper.

1.2.3. Inclusion of martial arts within the sports activities in the school programs of other countries

The schools from Japan introduced in their education curriculum the obligation of practicing martial arts within the classes of physical education. The conducted studies have proved that the level of mental-physical development in students that practiced these activities was superior to those who did not practice martial arts. Starting with the second grade, the girls and boys from Japan are obligated to follow classes of martial arts in

school.
In Canada the educational offer is targeted towards group and individual activities. The students benefit within the education offer from both mandatory as well as facultative subjects of study. They can choose from: dancing, games, different forms of gymnastics, individual activities, swimming, etc.
In India the school curriculum has as objectives also the practice of sports activities. Besides football and artistic gymnastics, the curriculum advances also sport or physical activities that are traditional. Among them are numbered: yoga and introduction to meditations, hockey and Gilli-Danda (one of the most ancient sports of India, similar to cricket or basketball), etc.

1.2. Physical Activities – determining factors of the state of health

Dragnea Adrian and Aura Bota in Teoria Activităților Motrice (*Theory of Movement Activities*, 1999, page 23) define movement activity as being „*the process of satisfying a need (functional requisite), or from the structural perspective a multitude of actions, operations, acts or gestures oriented in order to accomplish a certain objective*".
The efficacy of the activity is given by the energy quantity consumed in order to achieve the respective function and achieving a goal. Iacob Hanțiu (in Kinesiologie, *Kinesiology*, course notes, Oradea, 2013) defines physical exercise as being the type of human activity generally characterized by conscious motivated movements performed in distinct purposes either in the professional activity, or in sports, tourism and recreation (as an important component part of spare time).
Thus we can define movement as physical exercise. Physical exercise is omnipresent in man's life. It appears in different areas of activity and it manifests itself under different forms. A healthy body is formed from childhood. That is why it is very important to introduce physical exercise in the daily activity of children.

1.3.1. The benefits of systematic practicing of physical exercises

The benefits of practicing physical exercises by children are a primordial issue, not only because they help forming the bases of inter-human socialization, forming a harmoniously developed body, but also for the beneficial effects over the central nervous system, the digestive apparatus, the movement one or that of sense organs, etc.

1.3.2. The role of family in defining a healthy lifestyle by using physical exercise in the everyday routine

Within the family the child grows and develops, being influenced by the individual behavior models of family members. The models in their turn are determined, to a certain extent by the social-cultural factors, education characteristics, etc. Family is the one that induces also the lifestyle to the family members. The lifestyle refers to decisions, actions and life conditions. The healthy lifestyle is cultivated since the early age within the family, subsequently in kindergartens, schools, society, it is the one that cultivates the harmonious physical development and wellbeing of the body and mind.

1.3.3. Modern lifestyle versus physical activity

The way of perceiving education, education offers in general, should be seen and analyzed form a current perspective when more and more children are tempted to live in a virtual world that is separated from the reality of everyday life. The current education programs are targeted more and more towards a "laboratory" world in which children are subjected to know reality through the modern means of conveying information (tablet, computer, etc.) and not to experiment in nature, in an intimate way, the surrounding reality.
This dramatic situation that is already a world social phenomenon has removed and removes still children from any form of sports and physical exercise. Although the offer of sports activity in school or private sports clubs is present, either from motifs of laziness of the children or parents, or financial motifs, children choose to spend their free time in front of a TV set or computer.

1.3.4. Incidence of child obesity worldwide

The number of obesity cases among children is alarmingly rising worldwide. Countries such as China, Japan or North Africa ones that in the past did not know obesity only from the specialty books today are confronted with this scourge among the children of young age.
Obesity favoring factors: Even if the factors that lead to obesity are most of the times genetically determined, in

some cases, these can be connected to the geographic or social environment, to food habits, local traditions, to the preference of individuals for physical exercises or, on the contrary, to their repulsion towards physical effort, etc.

1.4. Martial arts as part of school curriculum

Among the sports areas that succeeded to draw the interest of school children and not only theirs, are numbered also martial arts, classes of martial arts can be found again in the education offer of many schools from Europe and also from other continents.
It was not long before they were taken over by many schools, at first private, and lately the public ones being selected as optional subjects of study.

1.5.1. **Aikido, means of putting students into gear in physical exercise**

What does Aikido mean? – in the dictionary of martial arts the term aikido is presented as a word composed, formed of three nouns: *Ai* – love, harmony; *Ki* – energy, spirit; *Do* – Path.
Being spectacular owed to the techniques of throwing and immobilization, apparently without any effort, aikido remains a martial art that is popular among audiences of any age.
The main idea from which we started the development of this paper was represented by the necessity of identifying new means and directions of diversification of the offer of physical exercise under the form of physical education classes so that these can be attractive for children also.

1.4.1. Arguments in favor of practicing Martial Arts and Aikido

Martial arts - aikido, judo, *tàijí quán*, etc., being dynamic activities request the permanent modification of the posture and a distributive attention, always on the alert, throughout the entire training, offering a framework for the suitable developing of the practicing of physical exercises.
Certain sports mass structures from Romania, within which aikido is practiced, have started a series of programs of promoting these sports subjects of study in schools. These, independently of the Romanian Aikido Sports Federation have introduced Aikido into various private school institutions.
As a result, practicing martial arts in general, among these also aikido, by the manner of approach and transmission of principles, means of training and socializing connection can become an attractive mean for all ages, from children of young age, until old people, not only for the development of the defense skills (a cult of Asian sports) but also for the development and perfection of bio movement qualities, balance, coordination or geographical orientation.

1.4.2. The role of Aikido exercises at children of 8 to 10 years old

We can identify some of the benefits of practicing aikido in the case of children of 6 to 10 years old. These, in some cases, succeed to avoid household accidents by having enhanced reflexes, and by familiarization with coordinated falls (ukemi-waza – receiving techniques or breakfall techniques), these can present a better coordination and succeed to protect themselves better; succeed to better coordinate their reflexes.

1.6. Overweight in children

The lack of physical exercise, given by the increase of the level of comfort, replacement of natural food with processed ones can lead to the unprecedented increase of the number of people that record these pathological somatic changes, and what is more worrisome is the fact that this scourge affects nowadays children in a higher proportion than in the past (Birnaure 2016).

The consequences of being overweight – of the consequences of being overweight, which are obviously very numerous we will mention only some of them especially the ones that can be felt by those children that suffer by these issues: movement difficulties, less alert reflexes, the fatigue sensation is felt much more rapidly than in other children, the inability of performing complex physical exercises or demanding activities from the physical point of view, integration in social groups, even at this age level, will be done more difficulty, there is the risk of occurrence of certain heart diseases since early ages (arteriosclerosis, coronary diseases, angina), the risk of certain diseases such as osteoarthritis, diabetes, etc.

1.7.1. Sedentary life. The concept of sedentary life

The problems related to sedentary life, by reducing physical exercises of individuals is an issue more likely of the modernity we are all living and that requests intellectual work more likely than intense physical work.

There are numerous studies that illustrate the fact that the lack of movement can determine the occurrence of a very large number of diseases. In essence, a great number of diseases with high incidence nowadays are rooted in the lack of movement, of physical exercises.

1.7.2. Causes and consequences of sedentary life

Sedentary life is defined as lack of physical activity. It can be considered as a disease of the modern world which debuted and evolves together with the industrial development, as we mentioned in a previous paragraph. Sedentary life must not be considered only as an effect of technological evolution of the modern world, being recorded in history since the most ancient times.

1.8. Food

Food can play a determining role in the morpho-somatic development of the child. Known under the name of „nutrition", term from the English language ("nutrition"), food owns the primordial role in the development of the child.

1.8.1. Healthy food

Among the most exposed to unhealthy food are children.
Why should we eat healthy? – when we refer to young ages, food is vital for the entire body well as for the evolution of the future adult.

1.9. Hygiene

Hygiene is a notion that we use in order to refer to the activities that we pursue throughout the day in order to keep ourselves clean and healthy.
According to the definition given on www. Dexonline/definiție, hygiene comprises:" a sum of rules and measures for preserving health".
The main directions of activity in this hygiene area are: the influence of the external environment factors on the body of children and teenagers, the school work regimen, the influence of the instructive-education process on the health of the schoolchildren, physical education and food in comparison with different age groups, the study of the health state over the young generation through the data concerning physical development, morbidity and demographics.

1.10. The art of healthy living

Sanogeneza/The art of healthy living, from the Latin "*salus* – health", represents the whole of the means and measures for the prevention and strengthening of the health state of the population.
A rational life diet is the one in which physical exercise is tightly related and present in the daily program as an inseparable part.

THE 2nd CHAPTER CHARACTERIZATION OF CHILDREN AGE 8 TO 10 YEARS OLD

At first sight, the term of growth refers to a quantitative growth (growth in weight, height), the one of development means more; it translates important qualitative accumulations of the human body and its functions, especially in the sense of differentiating the organs and their functions, their growing up, and after reaching the adult life begins the process of biological regression, natural phenomena in the evolutional cycle of life. That is why it is considered that both growth and development represent two inseparable sides of human evolution on the life cycle but not always with a parallel trajectory.
The development in children of young age is achieved not-uniformly marking periods of more rapid development and more slow ones. There exist a few guidelines that can help us assess the development of children of young age. Of these guidelines we can highlight:

Waist – the students present a non-uniform ascending evolution of the waist, recording the highest leaps between age 8 to 10 years old in the case of boys, the girls recording this outbreak of growth sooner, starting with the 2nd grade (Andronescu, A., 1966).

Weight – this somatic parameter presents an increasing evolution, recording obvious increases beginning with the ages 8 to 9 years old. The bone structure develops more rapidly than the muscle tissue. The structure of the muscle

fiber is weakly developed, the extensor muscle groups are more weakly developed than the flexor ones producing lax postures (Andronescu, A., 1966).

Effort ability – the ability for effort of the body is developed continuously, the heart rate is situated on average around 90 beats/minutes. However, the heart rate presents another accentuated instability. The respiratory frequency marks 30 beats per minute, still a high one producing fatigue due to the efforts of prolonged resistance. Each year brings both qualitative and quantitative changes. The child grows on average up to 12 years with 10 kilograms and in height with 20 cm. (Andronescu, A., 1966).

2.1. Mental particularities

Represents the stage of „concrete operations". The child with age between 6 to 10 years old begins to know his way around with abstract objects (numbers, relations, multiplications etc.), operations that he could not understand in the pre-school years. Even if children at this age could easily "dream" by projecting themselves in different characters of fairytale or fiction movies they took this world as real, many of their actions being connected to the imaginary world they had developed mentally. In the age period 6 to 12 years old the child already begins to understand and form relationships and the first concrete analyses (Wallon, H., 2002).

Cognitive development: the vocabulary begins to enrich this process of accumulation which extends until the age of 14 years old, in a rapid and complex manner (Vincent, R., 1972). Distributive memory and attention begin to become more accurate.
Creativity development: constitutes a combination of cognitive-operational, volitional, motivational abilities and acquisitions.
Personality development: the balance between the extrinsic and intrinsic motivations at children age 6 to 10 years old is manifested in a quite unbalanced. manner Failure can be experienced emotionally powerfully. As participant at sports activities, the loss of a top place, a material bonus (a long awaited toy as prize) can be experienced as dramas. In return children of the same age can respond positively to applauses, qualifiers, etc. (Şchiopu, U., Verza, E., 1995)

2.1. Movement at age 8 to 10 years old

Our research aimed from the very beginning to observe the criteria of mental-movement development of children age 8 to 10 years old. Thus, sports become an efficient way of taking action for the harmonious development of the human body with all the mental-physical-social valences.
Dragnea and Bota state that" human movements that form the general movement are structured from acts, actions and activities, grouped under the form of movement habits. "The efficacy of their performance is determined by heredity, education and environment. The authors propose the following observation: „physical exercise determines in a decisive manner any progress on the line of perfecting general movement and processes of physical development. (Dragnea, A., Bota, A., 1999, page 208).

THE SECOND PART THE PILOT EXPERIMENT CONCERNING THE EFFICACY OF THE IMPLEMENTATION OF AIKIDO IN THE PROGRAMS OF PHYSICAL ACTIVITIES IN STUDENTS AGES 8 TO 10 YEARS OLD

Within this pilot experiment we promoted the implementation of a branch of martial arts, namely Aikido in the program of sports activities in Elementary and Middle Schools.

The pilot experiment comprised, besides the technical aikido elements, also a set of athletics exercises quantifiable and measurable by sets of tests comprised in the Eurofit Application for the purpose of reinforcing speed, strength and resistance, movement qualities that are indispensable for practicing martial arts. The technical aikido exercises were used for perfecting the balance a quality which is tightly related to the appropriate development of the central nervous system. The idea that we wanted to verify in our study was that of by using the program model of training with a frequency of 2 times a week we will succeed to obtain more and more advanced values for the indicators that will measure the manifestation of movement abilities at the children from the study group.

3.2. The premises of preliminary research

Premise no. 1: The content of the lessons of physical education and extra-curriculum sports activities from schools provide the direction of approach of physical activities in an accurate manner, initiative defined in the Education Curriculum. But, it is up to the option of the teacher to fill in the content of these lessons of physical activity in class in a direction stipulated even by the Curriculum by the phrase: *the learning activities can be replaced, filled in or diversified according to the concrete conditions, experience of the teacher and the potential of students* (Education Curriculum. Annex no. 2 to the Order of the Ministry of Education and Research no. 3919 / 20th of April, 2005).

Premise no. 2: The identification of certain programs of attractive and stimulating sports activities implemented in the didactic offer of the teacher can ensure the premises of a harmonious physical and mental development of the children of young age. As we have shown also in the first part of this study, on international plan, there exist serious concerns referring to the implementation of some new approaches related to the content of the lessons of physical education and sports, of a diversification of the offers in this direction.

3.4. The purpose of the research

In order to obtain conclusive and solidly argued results, obviously, scientifically validated through the suggested experiment, we opted that our pilot study followed as main directions:

a) general purpose: in order to verify the use of the initiative of implementation of practicing other complementary sports activities, within sports activities with students, we considered it is important to verify whether these desiderata are achieved in a concrete, measurable manner. This way we designed the work program from this study.

b) subsumed purposes: by implementation of these complementary activities we wished to prove that by using elements from a complementary sport branch (aikido) we can influence in a positive manner the perfecting/development of some main movement qualities such as speed, skills, strength, resistance or balance.

3.5. Objectives of research

In order to achieve the previously defined purpose we set out the following objectives:

Observing and analyzing the effects of the implemented sports program in class.

The measurement of 4 somatic and physical parameters in order to find the effects of this type of physical activity. Comparative assessment of the two study groups.

The possible increases or decreases of the Body Mass Index (BMI) in the case of the participants to the pilot experiment.

3.6. Scientific preliminary report

The main idea that led us to the initiation of this experiment was represented by:

- *validation or invalidation of the statement that the aikido program, if promoted, can produce beneficial effects on the children participating to these activities, leading to perfecting the bio-movement potential, speed, skills, strength, resistance and balance, with beneficial effects on the bodily weight of the students.*

THE 4TH CHAPTER SUBJECTS AND METHODS

The development of the per se activities defined by the research project we envisioned was staged as follows:

THE FIRST STAGE - period 1st of October, 2012 – 1st of June, 2013

This stage meant the period of data and information collection and implementation of the concrete points of our preliminary research at *Transylvania College, Școala Internațională Cambridge Cluj* / *Cambridge International School, Cluj.*

Duration, timetable of physical exercises: Tuesday and Friday between 16.00 and 17.30.

The organization of the stages of testing the preliminary research: the initial testing took place in the first two weeks of October, namely between the 30th of September of 2012 and the 11th of October, 2012. The final testing took place in the last weeks of the month of June, in the period the 2nd of June 2013 and the 14th of June, 2013.

The training/ practicing hours were kept in regimen of "After school" optionally at the class were schoolchildren

young of age (8 to 9 years old) attended.

The 5 students who were components of the experimental group followed the advanced program of the training model (from within the preliminary research), as a result of the analysis performed on site and the drawing up of the protocols of partnership with the school management where we conducted the experiment.
The other 5 students from the control group performed daily physical activities from within the normal school program.

The training model implemented in the experimental group:
By the advanced methods we applied in order to perfect some movement qualities such as speed, some specific physical exercises comprised in the Eurofit application to which we added specific aikido technical exercises and training wise. We estimated that by applying in a combined manner these elements of perfecting the specific and general movement act, the improvement of the parameters of physical development and the ones specific to aikido can be achievable. These programs are shown in subchapter 4.3.5. and 4.3.4.
We used three aikido techniques for our study: shiho-nage, irimi-nage and ude-osae and other four training exercises specific to aikido.

The training model implemented with the control group
Their activities were planned in the same number of hours, namely 2 x 1.5 hours/week. These activities found again in the activity curriculum (according to the school schedule) consisted of: gearing the locomotor apparatus for physical effort, gymnastics, elements of the school of athletics, ball games, different applicative batons.

The tests applied in the pilot Experiment

The Body Mass Index Value (BMI)
Eurofit Application (1993, Eurofit Tests of Physical Fitness, 2nd Edition, Strasbourg)

- **Beep** resistance test—is executed on a distance of 20 meters. At the signal the running will be done from one direction to another as long as the subject resists. It is a resistance test.
- The speed test – **Shuttle** 10 x 5 meters – will be executed the running of these distances in a race against time. Time is cumulated throughout the intervals.
- The test **Stork** for assessing the balance, by timing the maintaining of the balance on one foot.

THE 5TH CHAPTER RESULTS

We present below the comparative tables of the values recorded by the two groups of subjects throughout the two stages found under observation.

Table 10: *Numerical summed values Experimental group*

Source: personal processing

No. subjects	Initial Shuttle (seconds)	Final Shuttle (seconds)	Initial BEEP (seconds)	Final BEEP (seconds)	Initial Balance (seconds)	Final Balance (seconds)
5	159	134	632	735	111	156

Table 11: *Numerical summed values Experimental group*

Source: personal processing

No. subjects	Initial Shuttle (seconds)	Final Shuttle (seconds)	Initial BEEP (seconds)	Final BEEP (seconds)	Initial Balance (seconds)	Final Balance (seconds)
5	155	188	585	525	119	111

Table 20: *Comparison results BMI for the two groups*

Source: personal processing

GROUPS	Mean	Difference means	Median	Deviation standard	Minimum	Maximum	Amplitude	Coefficient variation
Control	19.58		18.60	2.99	16.30	23.30	7.00	15.3%
Experiment	16.73		16.57	1.03	15.75	18.35	2.60	6.2%

Table 21: *Values ranks and parameters MANN-WHITNEY U BMI test*

Source: personal processing

GROUPS	N	Medium ranks	Sum of ranks	Parameters test	
Control	5	7.20	36.00	Z	-1.776
Experiment	5	3.80	19.00	P (2-tailed)	0.076
Total	10			Measure effect	0.560

The medium value of the body mass index at the experiment group is smaller than that of the control group with 2.85 kg/m^2 (14.5%), the group means being 16.73 in the case of the experiment group, respectively 19.58 in the case of the control group. The results vary between 16.30 and 23.30 at the control group and between 15.75 and 18.35 at the experiment group. The dispersion of the data around the mean is relatively homogeneous at the control group and homogeneous at the experiment group. The effect measurement index (0.56) shows a great difference between the two groups.

THE 6TH CHAPTER CONCLUSIONS

From the analysis and interpretation of the data recorded throughout the preliminary research (the pilot experiment) the following conclusions can be underlined:

a. From the results obtained as a result of the running of the program of physical activities, suggested by us, implemented within the classes of physical exercises at small classes (the 3rd to the 4th grade), occurs the necessity of implementing a strategy of diversification of the content of the training programs within the hours of physical education for young age schoolchildren.

b. The results obtained showed progress, on multiple directions, of the values of the indicators measured for the subjects of the experimental group. On average, the subjects have improved their movement qualities –speed and resistance, but also the capacity of maintaining the balance and coordination, in fact one of the initial desiderata of our initiative.

c. The teachers that conducted these activities for the two groups found under study were throughout the experiment in direct contact with the subjects monitoring each stage by filling in observation charts filled in after the development of the program. The record chart is found in Annexes.

THE THIRD PART PERSONAL CONTRIBUTIONS TO THE DEVELOPMENT OF A MODEL OF DIDACTIC DESIGN AND IMPLEMENTATION OF AIKIDO PROGRAMS TO YOUNG SCHOOLCHILDREN (8 TO 10 YEARS OLD)

7.1. The premises of introducing Aikido in the education curriculum

We advanced this research paper within the context of the general preoccupations of identifying some early intervention strategies for the improvement and diversification of the education offers of physical exercises at small classes (children of 8 to 10 years old). Our initiative aimed the implementation of an active long-term lifestyle that would comprise among the everyday preoccupations of the young children also the practicing of physical activities.

As we mentioned in the first part of this thesis there is a multitude of initiatives worldwide that refer to these interventions contributing to the theoretical and practical foundation of our desideratum.

The necessity of promoting the concept of "active lifestyle", even from young ages in our case in children of 8

to 10 years old, becomes a preoccupation accepted by an increasing number of countries by including in the programs of physical exercises found in the schedule of kindergartens, elementary schools, colleges of some diversified offers of sports activities by using the means specific to various sports branches.
The strategy of applying these offers is conceived depending on the popularity of these sports branches in the respective countries of the equipment provided by these education units, of the competence of the teachers who implement these programs and last but not least the support of the factors responsible within the School Inspectorates and management of the schools where these projects are promoted.

7.2. Premises, purpose, objective, hypotheses

The premises of the basic research targeted the following of the progress of the parameters of developing the movement qualities (speed, skills, strength, resistance) and of the specific utilitarian-applicative ones (balance) and of the movement utilitarian-applicative skills (crawling, pull-ups and pushing) at the pre-adolescence age at the children from the 3rd to 4th grade by introducing the Aikido program.

The purpose aimed to propose some improvements of the content of the physical activities from schools, even if they are ordered and stipulated by the Education Curriculum, through the physical education and sports curriculum, they can be improved, by implementing within these sports activities at class of some elements that are specific to various sports branches.
We proposed to approach this theme with the help of some guidelines, actions that would help us in data collection and then in the interpretation of the results in order to obtain a viable conclusion that would answer pertinently to the question from which this research paper started. We show from this activities: the numerical assessment of 4 Eurofit tests: B.M.I.., Shuttle, Beep, Arm push-ups (under eased up condition on the bench), which in fact illustrate the progress or regress of the measured physical parameters, the numerical values of the manifestations of speed, skills, force and resistance of the subjects, and of 2 balance tests: Flamingo and Stork by which we followed the value changes of skills and balance.
Another initiative was that of gearing the parents of the children in this experiment, 80 parents and questionnaires with punctual questions from the theme of the program proposed by us. The finality of the pursued initiative: the assessment of their perception concerning the validity of the initiative of diversification of the sports activities at the classes of sports activities at young classes of schoolchildren by the feedback shown by the parents.
The general **objective** of the research was represented by the identification of those means that would allow the diversification of the offer of the physical activity in children of a young age within the class physical activities but especially the assessment of the opportunity of an initiative of this kind based on a scientific rigorous analysis.
The hypothesis of the research initiated by us is framed in the general area of the research from this fundamental study area, the particularities being those that they involve subjects whose characteristics are pretty hard to assess and a sports branch not very popular in our country, but in the course of increase of the popularity among youth.

■ ***if practicing other sports subjects of study –other than those comprised in the education curriculum – within the program of physical activities (the aikido program) can produce the beneficial effects in order to improve the bio-movement potential and the increase of the attractiveness of the lessons of physical activities (distribution of the 80 from the questionnaire of the parents).***

Organization and location of the research

The basic research had the following staging:

THE SECOND STAGE – Period the 1st of October 2013 – the 1st of June 2014
The research developed in the period the 1st of October 2013 – the 1st of June 2014 throughout 34 weeks, comprising 102 hours of activities, achieved in 68 lessons of sports activities. The initial tests were achieved between the 30th of September 2013 – the 11th of October, 2013 and the final ones between the 3rd of June 2014 – the 13th of June, 2014. The location of the development of the research was the sports room of the "Brassai Samuel" High School with all the necessary equipment and that were used within the pilot experiment.
This stage comprised the research per se that consisted of on one hand in the procedures of implementation of our project at the "Brassai Samuel" High School of Cluj-Napoca city, with a number of 40 subjects, the 3rd and 4th

grade and the effects of this intervention on the population of young schoolchildren. As a result of this approach, to which was added the questionnaire filled in by the parents (over 80 respondents), the main directions pursued in this research were defined.

THE THIRD STAGE – Period 1st of September, 2014 – 1st of September, 2016

This stage targeted the processing of the recorded data, their interpretation and the elaboration of the paper per se for public defense.

Competences and content of the implemented program

Our program "Aikido in school", comprises general and specific common competences, distinct, found again in OMEN 5003, the 2nd of December, 2014, that stipulates: general competences targeted at the level of physical education subject of study marks the acquisitions of the student in elementary school. These compete with the development of the movement of the student, with the familiarization of the student with the skills necessary for a healthy life and a harmonious physical growth. The general competences stipulated for the 3rd and 4th grade develop the ones stipulated in the preparatory classes, the 1st grade and the 2nd grade. The specific competences are derived from general competences, they represent stages in their acquisition and are formed throughout the school year. In order to accomplish the specific competences in the curriculum are proposed examples of learning activities that capitalize the concrete experience of the student and that integrates didactic strategies appropriate for some diverse learning contexts.

The contents of learning are grouped on the following areas:

- Elements of organization of movement activities
- Elements of harmonious physical development
- Movement qualities
- Movement skills
- Hygiene and individual safety
- Personality components

Thus, our program "Aikido in school" is addressed to students from the 3rd and the 4th grade, with the level of beginner preparation, covering by its composition a large landing of benefits found again also in the Physical Education and Sports Curriculum and that can be addressed to this age.

8.1.1. The structure and content of the used program

As a result, in the basic research, we implemented **6** tests that are specific to the Eurofit application in comparison with the **4** tests applied in the pilot test and **5** technical exercises corresponding to aikido, in comparison with the **3** applied in the preliminary research.

Exercises of physical training (Eurofit)

Exercises for perfecting the Beep test indexes;
Exercises for perfecting the Shuttle test indexes;
Push-ups – eased conditions, support on the knee.
Exercises for the perfecting of the balance tests Stork and Flamingo.
Aikido preparatory exercises for balance and coordination:

Selecting the subjects

The methodology of selecting the subjects for our research was achieved in the same manner as in the selecting of the subjects participating at the pilot experiment. The selecting of the component subjects of the two groups (experimental and control), namely 2 x 20 students was achieved depending on the same exigencies necessary for the validation of the recorded results:

- the social environment from where they come from, rural or urban;
- the living conditions, at the house or block of flats;
- the floor at the block of flats, with or without an elevator;

• the school distance of the house of the subjects.

Methods of research used throughout the research
The method of the bibliographic study/the method of documentation
The method of observation
The method of questionnaire
The experimental method
The sociometric method
The method of organization and data presentation
The graphic method
The mathematical-statistical method
The method of classification/collation
The method of comparison/report
Quantitative analysis
Didactic principles used in physical activities to the two patterns found under study:
The principle of unity between the sensory and the rational (intuition and accessibility)
The principle of connecting the theory with the practice
The principle of acquiring the conscious and active way of the knowledge
The principle of systematizing and continuity of knowledge
The principle of thorough knowledge acquiring
The principle of individualization and differentiating of learning
The principle of stimulating motivation
The principle of ensuring reverse connection.

8.2. Training program. The proposed model

In the case of experimental group, the content and means of physical development used in the sports activities comprised the following circuits of physical exercises:
The 1st circuit: Programs of physical exercises connected to the Eurofit test as follows:
The 2nd circuit: Aikido technical exercises
The 3rd circuit: Games. We introduced games that are easy to practice, accessible to children.

In the case of the control group, the content and means of physical development used in sports activities comprised the following circuits of physical exercises:

The 1st circuit: Elements from the school of athletics
The 2nd circuit: Elements from basic gymnastics
The 3rd circuit: Ball sports games: football, handball, etc.

8.2. Scheduler and chart of the sports activities

Table 28: *Scheduler of sports activities – experimental group*

Source: personal processing

NO. CRIT.	**OCT.**	**NOV.**	**DEC.**	**JAN.**	**FEB.**	**MAR.**	**APR.**	**MAY**	**JUN.**	**TOTAL**
FREC -QUENCY	9 X 90 min.= 810 min.	8 X 90 min. = 720 min.	6 X 90 min. = 540 min.	6 x 90 min.= 540 min.	8 X 90 min.= 720 min.	9 X 90 min. = 810 min.	6 X 90 min. = 540 min.	9 X 90 min. = 810 min.	9 x 90 min. = 810 min.	70 x 90 min. = 6300 min.
MAIN MEANS	Circuit exercises	Circuit exercises	Circuit exercises	Circuit exercises	Circuit exercises	Circuit exercises	Circuit exercises	Circuit exercises	Circuit exercises	70x

NO. CRIT.	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUN.	TOTAL
	1 9x Elements from the circuit 2 5x Elements from the circuit 3 9x	1 8x Elements from the circuit 2 4x Elements from the circuit 3 8x	1 6x Elements from the circuit 2 3x Elements from the circuit 3 6x	1 6x Elements from the circuit 2 3x Elements from the circuit 3 6x	1 8x Elements from the circuit 2 4x Elements from the circuit 3 8x	1 9x Elements from the circuit 2 5x Elements from the circuit 3 9x	1 6x Elements from the circuit 2 3x Elements from the circuit 3 6x	1 9x Elements from the circuit 2 5x Elements from the circuit 3 9x	1 9x Elements from the circuit 2 5x Elements from the circuit 3 9x	37x 70x
INITIAL TEST	**THE FIRST week**									
FINAL TEST	**THE LAST week**									

Table 29: *Scheduler of sports activities – control group*

Source: personal processing

NO. CRIT.	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUN.	TOTAL
FRE-QUENCY	9 X 90 min.= 810 min.	8 X 90 min. = 720 min.	6 X 90 min. = 540 min.	6 x 90 min.= 540 min.	8 X 90 min.= 720 min.	9 X 90 min. = 810 min.	6 X 90 min. = 540 min.	9 X 90 min. = 810 min.	9 x 90 min. = 810 min.	70x 90 min. = 6300 min.
MAIN MEANS	Circuit exercises 1 9x Elements from the circuit 2 6x Elements from the circuit	Circuit exercises 1 8x Elements from the circuit 2 5x Elements from the circuit	Circuit exercises 1 6x Elements from the circuit 2 6x Elements from the circuit	Circuit exercises 1 6x Elements from the circuit 2 6x Elements from the circuit	Circuit exercises 1 8x Elements from the circuit 2 5x Elements from the circuit	Circuit exercises 1 9x Elements from the circuit 2 6x Elements from the circuit	Circuit exercises 1 6x Elements from the circuit 2 4x Elements from the circuit	Circuit exercises 1 9x Elements from the circuit 2 5x Elements from the circuit	Circuit exercises 1 9x Elements from the circuit 2 5x Elements from the circuit	70x 37x 70x

	3 9x	3 8x	3 6x	3 6x	3 8x	3 9x	3 6x	3 9x	3 9x
INITIAL TEST	**THE FIRST week**								
FINAL TEST	**THE LAST week**								

THE 9TH CHAPTER RESULTS DISCUSSIONS

9.1.1. The initial stage. Experimental group

Table 31: *The results recorded by the experimental group*

Source: personal processing

Name and First Name	Birth Date	Height	Weight	BMI	Stork Test (seconds)	Flamingo Test (seconds)	Eased push-ups (repetitions)	10 x 5m Shuttle Test (seconds)	*Beep Test* (seconds)
H. D.	2004	129 cm	27,51 kg	16,2	**Left- 0,5 Right–0,7**	30	**3**	20	69
R.M.	2003	130 cm	27,10 kg	16	**Left- 0,9 Right–0,5**	31	**4**	**32**	69
B.V	2003	140 cm	32 kg	16.3	**Left-0,12 Right–0,9**	42	**2**	**31**	128
B. M.	2004	132 cm	32 kg	18,4	**Left-0,14 Right-0,15**	32	**4**	**32**	148
C.A.	2003	132 cm	31 kg	17,8	**Left-0,14 Right-0,10**	30	**2**	**41**	192
P.A.	2003	132 cm	33 Kg	18.9	**Left- 0,3 Right–0,6**	21	**5**	**27**	199
M. R.	2004	131 cm	35 kg	20.4	**Left- 0,4 Right–0,6**	31	**2**	**21**	154
D. D.	2004	128 cm	31 kg	18,9	**Left-0,8 Right–0,5**	43	**1**	**18**	174
C.O.	2004	131 cm	29 kg	18.6	**Left-0,3 Right–0,6**	41	**0**	**29**	236
Z. A	2004	134 cm	32 kg	17,8	**Left-0,9 Right–0,9**	43	**2**	**37**	209
T.M.	2003	131 cm	33 kg	19.2	**Left-0,8 Right–0,8**	53	**6**	**20**	214
D.C.	2003	134 cm	27,19 kg	15,0	**Left- 0,9 Right-0,10**	36	**4**	**32**	94
K. A.	2004	140 cm	55 kg	17,9	**Left-0,6 Right–0,4**	42	**0**	**31**	**117**
R. I.	2004	142 cm	36 kg	17,9	**Left-0,4**	32	**3**	**32**	120

Name and First Name	Birth Date	Height	Weight	BMI	Stork Test (seconds)	Flamingo Test (seconds)	Eased push-ups (repetitions)	10 x 5m Shuttle Test (seconds)	*Beep Test* (seconds)
R.A.	2004	139 cm	36 kg	18,6	**Right–0,3 Left-0,5**	43	**3**	**41**	141
C.L.	2003	137 cm	32 kg	17,0	**Right–0,6 Left-0,7**	44	**2**	21	66
M.P.R.	2004	140 cm	39 kg	19,9	**Right–0,9 Left-0,5**	45	**1**	32	69
L.P.	2004	134 cm	30 kg	16,7	**Right –0,4 Left-0,8**	34	**0**	33	170
V.O.	2004	136 cm	33 kg	17,8	**Right – 0,8 Left- 0,6**	34	**6**	32	140
K.I.	2003	129 cm	30 kg	18,0	**Right –0,4 Left-0,8 Right–0,10**	53	**4**	41	187

9.1.2. The initial stage. Control group

Table 32: *Initial results control group*
Source: personal processing

Name and First Name	Birth Date	Height	Weight	BMI	Stork Test (seconds)	Flamingo Test (seconds)	Eased push-ups (repetitions)	10 x 5m Shuttle Test (seconds)	*Beep Test* (seconds)
C.C.	**2003**	**129 cm**	**32 kg**	**19,2**	**Left- 0,2 Right – 0,4**	27	**0**	19	90
H.M.	**2003**	**140 cm**	**33 kg**	**16,8**	**Left- 0,2 Right – 0,6**	25	**4**	22	67
A.M.	**2004**	**149 cm**	**41 kg**	18,5	**Left-0,6 Right – 0,4**	29	**5**	32	120
C. D.	**2003**	**139 cm**	**43 kg**	**29,7**	**Left-0,6 Right –0,7**	31	**2**	31	140
C.A.	**2004**	**138 cm**	**37 kg**	**18,9**	**Left-0,7 Right – 0,9**	32	**5**	39	219
S.K.	**2004**	**132 cm**	**33 kg**	**25.8**	**Left- 0,9 Right – 0,7**	34	**5**	27	190
C.M.	**2004**	**128 cm**	**30 kg**	**26,2**	**Left-0,6 Right–0,7**	30	**7**	20	120
M.C.	**2004**	**145 cm**	**38 kg**	**28.1**	**Left-0,6 Right –0,9**	31	**12**	15	120
A.I.	**2003**	**156 cm**	**44 kg**	**23,00**	**Left-0,9 Right–0,8**	27	**1**	27	180
B.L.	**2004**	**144 cm**	**40 kg**	22,2	**Left-0,8 Right–0,8**	29	**3**	21	170
M.I.	**2004**	**145 cm**	**40 kg**	18,8	**Left-0,8**	28	**1**	21	80

Name and First Name	Birth Date	Height	Weight	BMI	Stork Test (seconds)	Flamingo Test (seconds)	Eased push-ups (repetitions)	10 x 5m Shuttle Test (seconds)	*Beep Test* (seconds)
B.V.	**2004**	**151 cm**	**47 kg**	**20,6**	**Right–0,9 Left-0,10 Right-0,14**	30	**2**	30	90
C.C.	**2003**	**150 cm**	**43 kg**	**19,1**	**Left-0,6 Right –0,4**	31	**4**	26	110
V.T.	**2004**	**138 cm**	**26 kg**	**13,7**	**Left-0,4 Right –0,3**	32	**1**	25	121
S. G.	**2003**	**131 cm**	**27 kg**	17,7	**Left-0,6 Right –0,8**	31	**6**	31	140
V. S	2004	138 cm	34 kg	17,9	**Left-0,13 Right–0,15**	29	**2**	29	66
C.M.	**2004**	**137 cm**	**39 kg**	20,8	**Left-0,13 Right-0,14**	27	**1**	31	170
K.B.L.	**2004**	**130 cm**	**39 kg**	**15,5**	**Left- 0,8 Right–0,10**	33	**4**	19	69
O.M.	**2004**	**138 cm**	**33 kg**	**17,3**	**Left-0,15 Right–0,13**	34	**3**	39	150
V.J.	**2004**	**138 cm**	**49 kg**	**25,7**	**Left-0,8 Right–0,10**	40	**5**	37	70

The final stage. Experimental group

Table 33: *Final results experimental group*

Source: personal processing

Name and First Name	Birth Date	Height	Weight	BMI	Stork Test (seconds)	Flamingo Test (seconds)	Eased push-ups (repetitions)	10 x 5m Shuttle Test (seconds)	*Beep Test* (seconds)
H. D.	2004	131 cm	28 kg	16,1	Left- 0,9 Right–1,0	4	31	24	80
R.M.	2003	132 cm	28 kg	16,1	Left-0,10 Right– 0,7	6	34	35	81
B.V	2003	141 cm	33 kg	16.6	Left-0,11 Right-0,10	5	52	36	135
B. M.	2004	134 cm	33 kg	18,4	Left -0,14 Right-0,16	6	34	35	160
C.A.	2003	135 cm	30 kg	16,5	Left-0,15 Right-0,14	4	31	39	195
P.A.	2003	133 cm	30 Kg	17,0	Left- 0,4 Right–0,9	7	28	29	210
M. R.	2004	134 cm	34 kg	18,9	Left- 0,5 Right-0,10	6	34	22	170
D. D.	2004	129 cm	30 kg	18,0	Left-0,10 Right–0,8	3	42	20	220
C.O.	2004	134 cm	28kg	15,6	Left- 0,5	3	40	29	260

Name and First Name	Birth Date	Height	Weight	BMI	Stork Test (seconds)	Flamingo Test (seconds)	Eased push-ups (repetitions)	10 x 5m Shuttle Test (seconds)	*Beep Test* (seconds)
Z. A	2004	136 cm	28 kg	15,1	Right–0,9 Left-0,10 Right-0,10	3	44	39	170
T.M.	2003	133 cm	31 kg	19.2	Left-0,10 Right-0,10	9	54	24	230
D.C.	2003	134 cm	28 kg	15,6	Left-0,10 Right 0,14	6	39	35	200
K. A.	2004	142 cm	34 kg	16,9	Left- 0,8 Right–0,6	4	43	34	120
R. I.	2004	143 cm	33 kg	16,1	Left- 0,5 Right–0,6	5	37	33	135
R.A.	2004	141 cm	35 kg	17,6	Left- 0,8 Right-0,10	7	45	43	160
C.L.	2003	138 cm	30 kg	15,8	Left-0,9 Right-0,12	5	46	29	120
M.P.R.	2004	142 cm	37 kg	18,3	Left-0,8 Right-0,6	3	49	38	67
L.P.	2004	135 cm	31 kg	17,0	Left- 0,8 Right–0,8	1	36	40	180
V.O.	2004	137 cm	30 kg	16,0	Left-0,8 Right–0,7	9	36	35	128
K.I.	2003	130 cm	28 kg	16,6	Left- 0,8 Right-0,10	7	55	46	240

The final stage. Control group

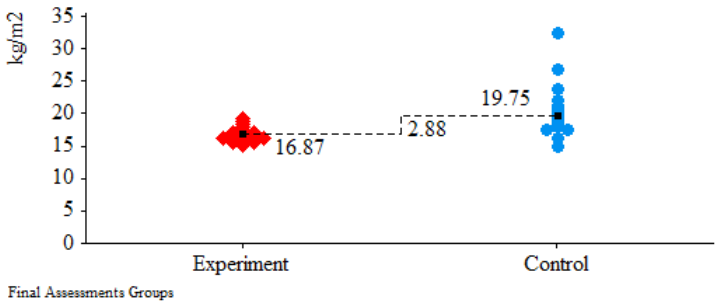
Table 34: *Final results control group*

Source: personal processing

Name and First Name	Birth Date	Height	Weight	BMI	Stork Test (seconds)	Flamingo Test (seconds)	Eased push-ups (repetitions)	10 x 5m Shuttle Test (seconds)	*Beep Test* (seconds)
C.C.	2003	130 cm	34 kg	21,1	**Left- 0,5** **Right – 0,7**	27	1	**18**	91
H.M.	2003	141 cm	45 kg	17,6	**Left- 0,9** **Right – 0,5**	25	4	**20**	60
A.M.	2004	150 cm	44 kg	19,6	**Left-0,12** **Right – 0,9**	28	4	**30**	121
C. D.	2003	140 cm	43 kg	26,8	**Left-0,14** **Right–0,15**	30	2	**31**	135
C.A.	2004	140 cm	38 kg	23,7	**Left-0,14** **Right–0,10**	30	3	**37**	160
S.K.	2004	133 cm	34 kg	18,9	**Left- 0,3**	31	4	**28**	180

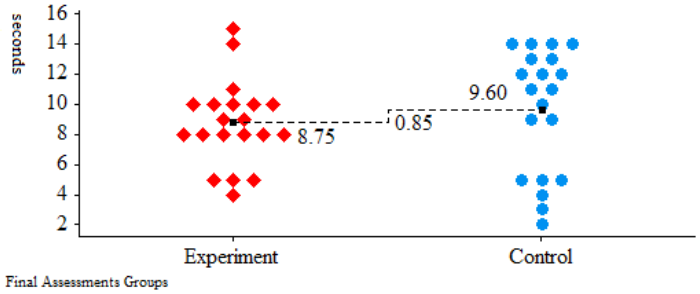
Name and First Name	Birth Date	Height	Weight	BMI	Stork Test (seconds)	Flamingo Test (seconds)	Eased push-ups (repetitions)	10 x 5m Shuttle Test (seconds)	*Beep Test* (seconds)
C.M.	2004	129 cm	30 kg	18,0	**Right – 0,6 Left- 0,4**	28	1	**21**	121
M.C.	2004	146 cm	39 kg	18,3	**Right – 0,6 Left-0,11**	30	1	**13**	130
A.I.	2003	157 cm	44 kg	17,9	**Right – 0,8 Left - 0,2**	27	2	**20**	160
B.L.	2004	147 cm	44 kg	20,4	**Right–0,4 Left-0,12**	29	1	**20**	120
M.I.	2004	152 cm	48 kg	20,8	**Right – 0,8 Left-0,10**	29	2	**19**	82
B.V.	2004	152 cm	44 kg	19,0	**Right – 0,9 Left- 0,5**	31	3	**24**	80
C.C.	2003	140 cm	29 kg	14,8	**Right – 0,3 Left-0,13**	30	1	**25**	100
V.T.	2004	139 cm	38 kg	15,0	**Right–0,10 Left-0,14**	30	1	**24**	100
S. G.	2003	132 cm	28 kg	16,1	**Right – 0,5 Left-0,11**	30	2	**32**	121
V. S	2004	139 cm	36 kg	18,6	**Right – 0,9 Left-0,13**	28	1	28	67
C.M.	2004	138 cm	42 kg	22,1	**Right–0,14 Left- 0,5**	27	1	33	120
K.B.L.	2004	131 cm	42 kg	32,3	**Right – 0,4 Left-0,12**	43	1	18	68
O.M.	2004	139 cm	32 kg	16,3	**Right – 0,8 Left- 0,9**	33	3	30	140
V.J.	2004	137 cm	33 kg	17,6	**Right – 0,4 Left-0,14**	42	3	25	130
					Right–0,15				

9.2.1. Experiment vs. Control



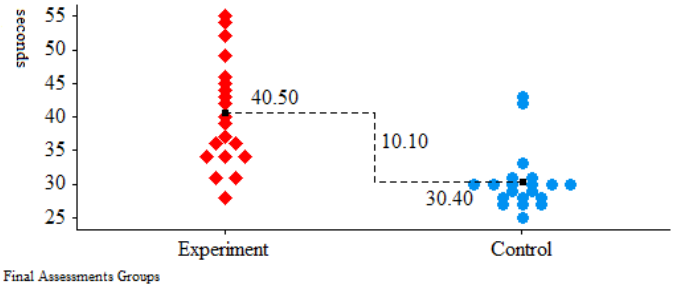
Picture 71: *Comparative Interpretation BMI final assessments*

Source: personal processing



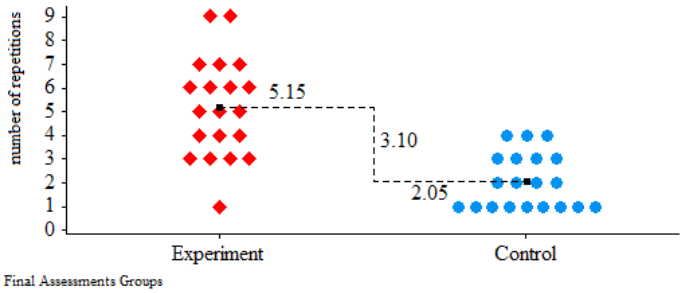
Picture 72: *Comparative Interpretation final assessments Stork test – left foot*

Source: personal processing



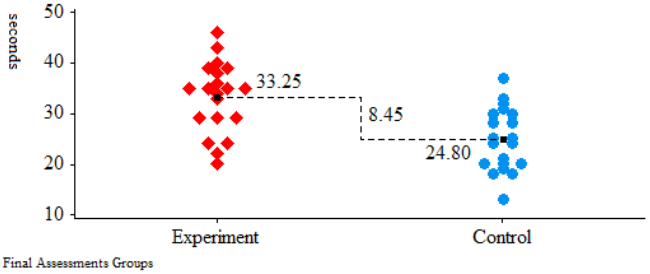
Picture 74: : *Comparative Interpretation final assessments Flamingo test*

Source: personal processing



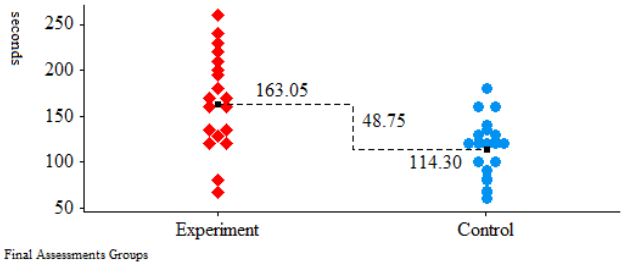
Picture 75*: Comparative Interpretation final assessments eased Push-ups test*

Source: personal processing



Picture 76: *Comparative Interpretation final assessments Shuttle test*

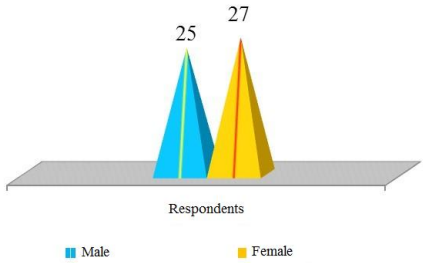
Source: personal processing



Picture 77: *Comparative Interpretation final assessments Beep test*

Source: personal processing

9.3. Processing questionnaire data for parents

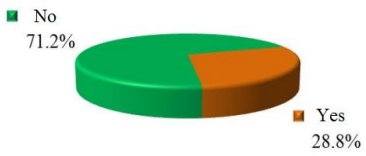


Picture 78: *Chart number of respondents*

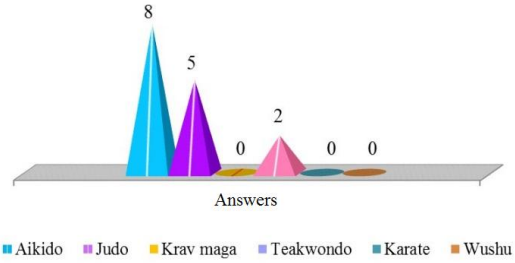
Source: personal processing

PROCESSING QUESTIONNAIRE ITEMS

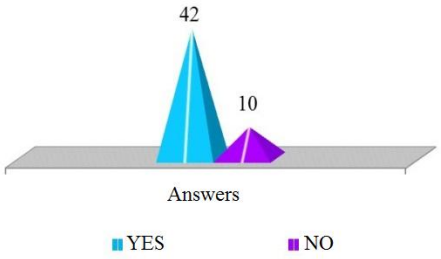
Do you practice Martial Arts?



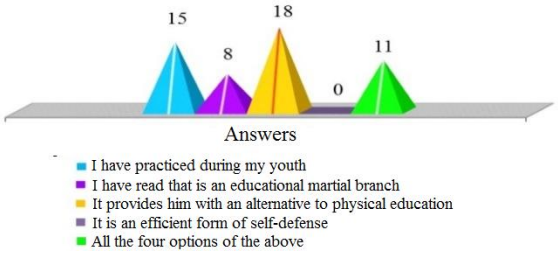
What Martial Arts have you practiced?



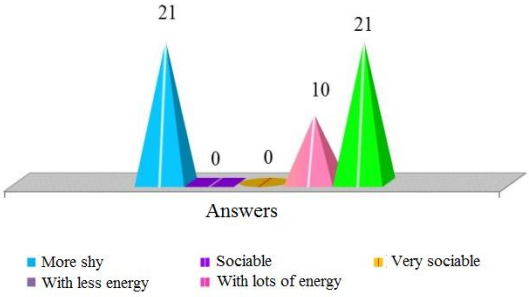
Do you consider important the practicing of Martial Arts at the age 8 to 10 years old?



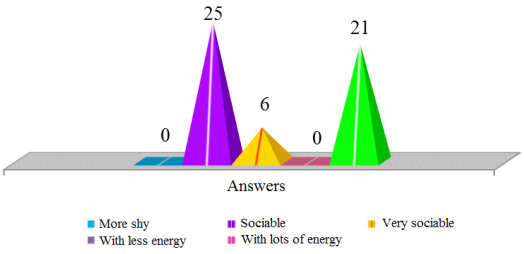
What determined you to enroll your child to aikido?



Before practicing aikido my child was



A year after practicing aikido my child was:



QUESTIONNAIRE FINDINGS

As we mentioned at subchapter 8.2.3, in the questionnaire proposed by us, we requested from the parents of the children involved in our research to answer punctually in relation to their observations, on the effects that they noticed in the behavior and performance of the children as a result of their participation to the program of aikido- sports activities.

Even if we are realistic on the fact that the scientific interpretation of this questionnaire is an informal one, we must state that the complex technique of sociological research involves numerous stages, the questionnaire inquiry "is almost always an opinion inquiry" (Miftode, 1995), that the subjects are inquired concerning a certain area of social reality with which they do not make direct contact they are situated outside the social environment of the issue. Because of this reason some authors define the questionnaire as "a secondary research instrument, a simple instrument among others" (Miftode, 1995).
The questionnaire proposed by us is a standardized and individualized one, the parent being questioned about aspects related to their observation on the behavior of their children during and after the implementation of our aikido program at children between 8 and 10 years old.

The most relevant answers after our assessment are the ones comprised at:

Item 3 80% answered with YES, they are important activities.
Item 4 point 3 alternative to the classical courses of physical education.
Item 6 point 2 have become more sociable, more organized with their spare time.
Item 8 positive reactions of children concerning social aspects.
Item 10 Yes 67% stated that they wish to further practice Aikido

THE 10TH CHAPTER CONCLUSIONS

As a result of developing research and based on the arguments provided by the experiment applied at the level of young children' classes, with the subjects comprised in the research, with ages between 8 and 10 years old we found out that the hypotheses of work were confirmed most of the time which allows us to formulate the following findings and appreciations:

Aikido implementation in the program of sports activities at young children classes, the 3rd grade and the 4th grade proved to be a successful initiative, the measure of this success being the progresses made by the subjects of this research, both from the point of view of the manifestation of the physical qualities as well as of their participation to these activities (according to their presence to the implemented activities)

The perception of the parents on this initiative was a good one, under the conditions in which, from our point of view, the parents are the finest analysts of their children, being able to see evolutions or on the contrary involutions as well as opportunities for the children or on the contrary, dangers. Thus, we can confirm that with the help of the results obtained the opportunity of diversification of the content of physical activity at the children aged 8 to 10 years old proves its usefulness and that it is an activity of auger well.

From the dynamics of the collected data and the results recorded by the subjects concerning the improvements of some measured parameters, we consider that mostly the purpose of our research was achieved. The measurement performed reflect in a distinctive manner that the subjects of the experimental group record increases at most of the applied tests less at the Stork test.

By finalizing the research, we found out that the work hypothesis set out at the beginning of this research was confirmed. This way, the hypothesis concerning the development of the manifestations of speed, skills, arm strength and balance (Flamingo test) was confirmed. The results of the Stork test on the left and right foot was not validated, the hypothesis being null as a result of the interpretation of these data. However, on the general mindset of the testing, the work hypotheses were validated. We can take into account also the fact that our program was not an intensive one, but an extensive one, so, we did not succeed to perfect all the chapters for which we effectuated the performance tests.

The interest of children for these sports activities was confirmed (as a result of the questionnaire filled in by the parents). The answers confirmed the occurrence of an emulation among the parents and children concerning the lessons with Aikido theme.

Because of this implemented strategy, the diversification promoted in the developed physical activities, we recorded a very reduced number of absentees among the subjects from the experimental group in comparison with the subjects of the control group (Record Charts at Annexes). The achieved measurements illustrate this fact, the subjects of the experimental group obtained better results. The results obtained by the subjects of the research are conclusive: With relation to the body mass indexes, the significance threshold $p = 0.004 < 0.05$ for $z = -2.870$. The hypothesis of null is rejected; the two groups differ meaningfully concerning the body mass index. The effect increase index (0.45) shows a medium difference towards great between groups. For the speed parameters, the meaning threshold $p = 0.001 < 0.05$ for $z = -3.415$. The null hypothesis is rejected; the two groups differ meaningfully in the case of the speed recorded at the transfer tests. The index of effect measure (0.54) shows a great towards greater difference between the groups. At the parameters of resistance, the value of the meaning threshold $p=0.005 < 0.05$ for $z = -2.831$. The null hypothesis is rejected the two groups differ meaningfully in relation to resistance increase. The index of effect measure (0.45) shows a medium difference towards great between the groups. The results of the force, eased push-ups manifestations - Mann-Whitney Test show a meaning threshold $p < 0.001 < 0.05$ for $z = -4.393$. The null hypothesis is rejected; the two groups differ meaningfully in relation to force and resistance of arms. The effect measure index (0.69) shows a great towards greater difference between the groups. The balance tests give the following directions: the Flamingo test records the meaning threshold $p < 0.001 < 0.05$ for $z = -4.328$. The null hypothesis is rejected; the two groups differ meaningfully in the case of the static balance on the stronger foot. The effect measure index (0.68) shows a great to greater difference between the groups. The Stork Test, the left and the right foot generate a result of the Mann-Whitney test with a meaning threshold $p = 0.236 > 0.05$ for $z = -1.185$. The null hypothesis is accepted; the two groups do not differ meaningfully statistically in the case of maintaining the balance on the left foot. The questionnaire given to the parents, the answers of the respondents record a considerable improvement of the participation and gearing of the subjects in these diversified physical activities.

The main objective of the research must be preserved and promoted, the one through which the pleasure, safety, health strengthening, effort ability increase achieved through diversified means of physical activities can build the main intervention means of the physical education and sports teachers.

Through this experiment we propose a re-assessment of the Education Curriculum that would comprise new directions of the approach of the content of the Physical Education and Sports Programs. These Programs should include in the timetable of sports activities, diversified physical exercises from other sports branches that are successful with children and young students, in order to complete the education, offer and in order to create a special attractiveness for these activities so that the reorientation of the students' attention towards physical activities better than towards a sedentary life could be successful.