visual skills, mostly determined by the courses they had taken in high school.

Consequently, the above results confirm the working hypothesis, according to which, when based on a thorough level of information, but most importantly, on a good management of the cognitive and motor skills and knowledge, an accurate assessment of the personal intelligence can be carried out, which could further positively influence a successful life.

REFERENCES:
Adler A. , *Human knowledge,* IRI, Bucharest, 1996
Azzopardi G., *Develop your intelligence,* Teora Publishing House, Bucharest, 2000
Belous V., *Fundamentals of Performance,* Performance Publishing House, Iaşi, 1995
Damasio A.R., *Emotion, Reason, and the Human Brain*, Putnam, 1994; revised Penguin edition, 2005
Damasio A.R., *Body and Emotion in the Making of Consciousness,* Harcourt, 1999
Damasio H., Human *Brain Anatomy in Computerized Images,* 2nd edition, Oxford University Press, New York, 2005
Goleman D., *Emotional intelligence, key to success in life,* Alpha House, Bucharest, 2004
Havârneanu C., *Knowledge of the psychological person,* Polirom, Iaşi, 2000
Holdevici I., *Psychology of Success,* Ceres Publishing House, Bucharest, 1993
Lassus R., *Self discovery,* Teora Publishing, Bucharest, 2001
Popescu Ş., *Knowing the self through psychological tests,* Header House, Bucharest, 2000
Selye H., *Science and life,* Publishing, Bucharest, 1984
Siewert H. H., *How to calculate IQ,* Gemma Pres House, Bucharest, 1996

UNE ÉTUDE SUR LES CORRÉLATIONS ENTRE LE MOTEUR ET LE QUOTIENT INTELLECTUEL COGNITIF DES ETUDIANTS DU SCIENCE DES ALIMENTS

Résumé: *L'intelligence n'est pas un critère universellement valable, car chaque personne dispose d'un bagage d'aptitudes et de connaissances qui la différencie des autres. En même temps, nous ne pouvons pas considérer qu'une personne est «sotte» parce qu'elle n'a pas de connaissances en mathématiques, biologie, linguistique ou même dans le domaine de l'éducation physique, car, certainement, elle dispose d'autres aptitudes et connaissances dans d'autres domaines.*
Mots clefs: *intelligence du langage, intelligence mathématique, intelligence visuelle*

PROJECTING THE STRENGTH LEARNING UNIT TO THE LOWER SECONDARY (ADVANCED VALUE GROUP - 8TH GRADE)

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Abstract:
Projecting learning units on value groups requires a more complex than the one imposed when planning frontal activities, claiming varied means or complicating them and including a different dosage, considering the fact that the work time is identical for all the groups, which renders the motor ability related themes prohibitive for an alternate approach of the work groups. The variety of means included in the experimental curricula for each motor ability and value group, similarly to the relative dosages, with a superior and inferior limit (Example: 2-3 series x 4-12 repetitions), allow the teacher to adapt the educational process based on the existing material conditions, but most importantly, based on the students' reaction to the proposed means.
Keywords: *Lesson plan, differentiated approach, accessibility, muscular strength, effort dosage*

INTRODUCTION

Strength is the motor ability we exclusively need in order to be able to move. Therefore, increased attention must be granted to the dosage of the effort, through an optimal effort potential – workload quota, any excess leading to great neuro-muscular tension, with negative effects on the nervous, circulatory and respiratory systems. With regard to educating the force potential at various ages, specialists fail to reach an agreement. In the first phase of puberty, the solicitation value must not be greater than 30% of the body's mass, reaching 75% at 14 years of age. Once the body has fully matured, the solicitations may be equal or greater than the mass of the body. Given the functional particularities of the lower secondary students, the annulment or reduction of the pauses in order to increase the intensity of the effort is prohibited, the only option being in this case the increase in the work frequency. The breaks given after each training cycle lead to a better effort management. The pauses are longer when strength is trained together with speed or handiness, as the nervous system requires an optimal excitability and thus the body must be allowed to rest. When strength is trained in combination with endurance (mainly developed through circuit exercises), the pauses can be shortened.

WORK HYPOTHESIS AND CONTENT OF THE EXPERIMENT

The students were divided in three value groups, which allowed a better selection, planning and rational dosage of the employed action systems, also diversifying the working method based on the real potential of the students.

The advanced value group was subject to a level of training that exceeds the medium level of the students, the number of students included in this group being more reduced, boys being numerically superior to girls. The concerns related to developing strength were focused on different muscle groups and segments and tested at the end of the two theme cycles (superior and inferior limbs for the first one, back and abdomen for the last one). Moreover, at the end of the second cycle, there are four lessons that educate the endurance strength by the circuit work method, alternating and training all the muscle groups. The first lesson system was put into practice in November-December and consisted of 8 lessons.

The allotted time is greater than the one of the first two lessons (10'-15'), due to the combination of alternative themes and making up for a great debut of the indoor activities. In the other lessons, the number of themes increases (the applicative skills are introduced, together with the gymnastics equipment, which require great efforts and thus educate strength better) – therefore, the allotted time shall be reduced (8'-10'). The manners of manifestation are approached with the strength of the inferior legs and the planned means are diversified (exercises with the weight of the body – squats, jumps, tractions, throwing medical balls, cane, gymnastics bench and fixed ladder), alternating the individual work with the one in pairs for each value group. The effort was directed towards the development of the muscle groups, gradually increasing the value of stimuli for new adaptation forms. For length reasons, the paper only presents the first lesson system for the advanced value group

CONCLUSIONS AND RECOMMENDATIONS

- Less demanding exercises are recommended (medical balls, sand bottles, light weights, the weigh of the body), and those based on external endurance and increased effort must be considered based on the features of each student. No matter what the employed means might be, the muscles and joints must be prepared before the beginning of the strength training.

The *execution order* of the strength exercises can be carried out in two ways:

1. *vertical planning*: the exercises are different, allowing the muscles to rest and further training other muscle groups through new exercises. The positive effect is given by the faster and better recovery, thus reducing the allotted time period;

2. *horizontal planning*: the same exercise has to be repeated many times without combining any other exercises.

The effort leads to hypotrophy and local muscular fatigue, the allotted time being greater than in the first case.

The unknown exercises or the ones not mastered well enough aimed at developing weak muscle groups must be avoided; the effort must be applied gradually and the number of repetitions must be determined individually.

The strength exercises must be alternated with the relaxation ones, which are aimed at resting the contracted muscle fibers.

The static exercises must be alternated with dynamic ones (at the higher value groups), in order to increase the efficiency; in the first lessons of the theme cycle, no increased intensities will be employed – execution speed, movement amplitude – slow and controlled movements will be used in order to prevent the ligament ruptures and tendon ruptures;

Determining the tempos and recovery intervals must be individualized, even if the action is complicated, the force effort leading to a rapid depletion of the energy resources. Concerning the medium values, the 30" pauses allow the recovery of only 50% of ATP and CP – therefore the effort is not well tolerated, the 60" ensure an increased concentration of lactate, and those that last between 3' and 5' allow the full recovery of the ATP and CP.

The individualization of the effort can be carried out through various ways:

1. by respecting the work time and predetermined pauses, but the effort must be dosed individually;

2. each student modifies the work time and pauses duration based on his or her own needs, in order to carry out an imposed number of repetitions (harder to achieve in the physical education lessons that approach at least two lesson themes).

Table. Projecting the "Strength" learning unit, 8th grade
Lesson no. **8**; Theme cycle: **1**; Value level group: **advanced**; Period: *November - December 2007*

Nº	Ref. Ob.	Ob. Major Ops.	Content Details	Examples of learning activities	Estim. dose	Resources	Assessment
1.	1.1 1.2 1.3 3.1 3.2 3.3 4.1 4.2	Educating the segment force and surface	Dynamic type force Explosive force Mobility	In pairs, back to back, with the arms up and one hand joining a gymnastics cane, alternatively lunging forward while the partner broadly extends and arches the shoulders (3 x 30" per student) Lunging forward on the right foot, changing the lunging leg by jumping (3 x 12 repetitions) From laying face down on the gymnastics bench, tractions on one arm (changing the arm after each repetition) (4 x) Chained length jumps (3-4 x 6 jumps). Actively exercising during breaks	10'–15'	Gymnastics canes Gymnastics benches	Predictive
2.	same	same	same	same as L_1	same	same	Current
3.	same	same	same	From resting one leg on one of the fixed ladder's steps, arms on another step at shoulder level, lifting and lowering the body with the other leg being strapped to a heavy object (2 x 12 repetitions) From laying face down, the legs on the gymnastics bench, push ups while clapping the hands (2 x 7 – 10 repetitions) Squats on one leg, alternated with jumps and rotating the body by 90^0 or 180^0 (2 x 25") In pairs, face down, heads near, rested on one arm and reciprocally touching one hand (3 x 30") Exercises educating the respiration during the breaks	8'–10'	Fixed ladders Gymnastics benches	Current
4.	same	same	same	Idem L_3	same	same	same
5.	same	Optimizing the strength of the arms and legs through complex efforts	Segment mixed and dynamic force	Repeated jumps over 4-5 obstacles of different heights (30 – 40 – 50 – 60 cm) (3 x) In pairs, face to face, passing the large medical ball through various means, the distance between partners being of (6 – 9 m) (2 x 1') Lifting the gymnastics bench, which has one margin on the fixed ladder (lifting it from the ground side above the head and getting it down again) (2 x 10-12 repetitions) Transporting the partner in the back (2 x 10 – 15 m) In pauses – rotations, swings, swirls, muscle training extensions	idem	Obstacles Medical Balls Gymnastics benches Fixed Ladder	Current
6.	same	same	same	same L_5	same	same	same
7.	same	same	same	Tractions on a fixed rod, alternated with moment of maintaining the hanging position, with bent arms (2 x 7 – 8 repetitions) Laying down on a side, knees flexed and feet pointing up, the partner puts the hands on the other one's feet, followed by a strong extension of the legs, trying to win the partner over (2 x 10 – 15 repetitions) Hanging from the last step of the fixed ladder (up), descending on the arms, keeping the legs flexed (2 series) In pairs, crouching, one leg extended frontally, holding both hands and jumping from one leg to the other (2-3 series x 20")	same	Fixed ladder Fixed rod	same
8.	same	same	same	same L_7	same	idem	Self-evaluation

REFERENCES:
1. Bompa T.O. Developing the biometrical qualities (time framing). Bucharest: Exponto, 2001. 282p.
2. Raţă G. The methodology of teaching physical education and sports. Iaşi: PIM, 2008. 337 p.
3. Raţă G., Raţă B.C. Basic motor abilities (theoretical problems). Bacău: Plumb, 1999. 142 p.
4. Scarlat E., Scarlat M.B. Physical education and sports. Lower secondary text book. Bucharest: E.D.P., 2002. 528 p.

LA METHODOLOGIE DE PROJECTION L'UNITE D'APPRENTISSAGE DE RESISTANCE A LA VALEUR GROUPE INFERIEUR SECONDAIRE AVANCE (8^E ANNEE)

***Résumé**: La projection des unités de valeur impose un effort plus élevé que celui demandé par les activités frontales, soit en utilisant des moyens variés, soit en compliquant quelques moyens communs et le dosage différencié, tandis que la durée reste la même quelle que soit le groupe d'élèves entraîné, les thèmes abordant des qualités restrictives aux groupes de travail. La variété des moyens inclus dans le programme expérimental pour chaque aptitude physique et groupe de valeur, tenant compte des limites inférieures et supérieures (Exemple: 2-3 séries x 4-12 répétitions), permet au professeur d'adapter le processus éducatif aux conditions matérielles existantes, mais notamment à la réaction des élèves aux moyens proposés.*
***Mots clefs:** plan de leçon, traitement différencié, accessibilité, force musculaire, dosage de l'effort*

DEVELOPMENT LEVEL OF COORDINATION SKILLS IN ELEMENTARY SCHOOL PUPILS

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Abstract:
The degree of motor skills manifestation changes with age. To put it simply, three periods of development may be found: a growth phase in childhood and adolescence, a "plateau" phase, and a decrease phase in adulthood. Individual development exhibits, as specialised literature noticed and described, sensitive and critical periods. Sensitive periods are characterised by the more intense response of the body to external stimuli in certain periods. In return, critical periods are seen either as a phase when it is necessary to apply certain stimuli to reach well determined development effects, or as a stagnation, if not plain involution phase.
***Keywords:** Pupils, elementary education, physical education curricula, motor skills, coordinative skills.*

INTRODUCTION

Elementary school includes pupils aged 7-11, an age group representing an essential moment in the child's life due to the changes that occur. Small children (pre-puberty 6–11 year-old girls and up to 12 year-old boys), characterised by the beginning of school and an impetuous gestural behaviour, display an overt attraction towards sport and sporting competitions. This age (as children are small and light) may be considered a highly favourable stage in learning for the basic technical training.

Training coordination, according to specialists, should be introduced when the plasticity of the nervous system is high, and motor habits have not yet become permanent. The scope of coordination training changes in adolescence, when the physical development alters the motor habits already formed. During this stage, the refining of motion should be more important than acquiring new motor skills. In the post-adolescence stage, coordination training may be brought again to a new higher level.

In order to achieve the analysis of the parameters of coordination skills, a set of 11 sporting tests was used, divided according to the 5 manifestation forms of the coordination skills. Thus, in order to assess and regulate the dynamic and spatial-temporal parameters of the motor act, 2 tests were used, viz. marking leaps, and ball throwing to a target with the back turned; to assess balance, 3 tests were used, viz. balance on the gym bench, the dynamic balance test, and the backwards walking balance test; to assess rhythm, the sprint in a given tempo was proposed as a test; to assess spatial orientation, the 4th manifestation form of coordination skills, the square test and the distance assessment test were used; to assess movement