# Presentation on the topic: DIDACTIC OPPORTUNITIES OF MUSCLE AND MOTION PROGRAMS IN PREPARATION OF SPECIALISTS FROM PHYSICAL EDUCATION



Prepared by student 64 group: Dybkov Bohdan Markovich **Abstract:** Program Muscle and Motion - allows you to enter the body and understand the nuances of strength training. The program provides a detailed three-dimensional visualization of the anatomy of the human skeleton and muscles while performing strength training exercises, and many additional features. Program Muscle and Motion can also use teachers and teachers in the classroom biology or anatomy can see looks like this or that muscle, where it is that movements can be done and how to do them correctly.

Introduction: Information competence of teachers of physical culture, their ability to implement modern information technologies in the system of training is one of the urgent problems of education. Implementation in practice of the study of human movement of advanced biomechanics resulting in a change in research methodology, which resulted in increasingly have their computerization at all levels, the development and use of high-performance microcomputers.



#### **Methods:**

During the study used the following methods:

- synthesis of scientific literature,
- theoretical analysis,
- monitoring,
- processing of research results.

Discussion: The main body of work is considered a program which analyzes how it works, its features. The program also includes Muscle and Motion can find lots of interesting information from common mistakes to plan training. In the common errors and problems you can choose the body parts to make it easier to search. Another useful section - "Tests and evaluation." It tells how to assess their flexibility and joint mobility. And if there is a problem, you can learn how to fix them. For example, one video tells that stoop, thoracic kyphosis and difficulties with the proper performance of certain exercises may be associated with clogged muscles thigh (for teachers and teachers). Further, as to find out whether you have this problem, and how to stretch these muscles.

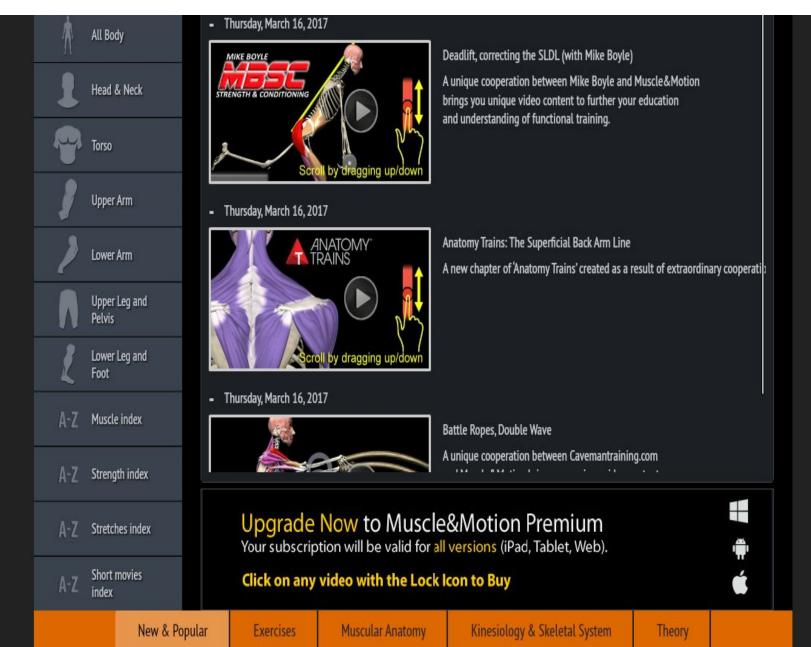
- Results: Muscle and Motion program is perfect for personal trainers, trainees, doctors, teachers and anyone interested in anatomy and muscle strength training. There is a unique program for fitness training. This product provides a detailed three-dimensional visualization of the anatomy of the human skeleton and muscles while performing strength training exercises, and many additional features. This set of exercises will be useful and interesting not only for those who have decided to study the anatomy of strength training, but also for those who do exercise regularly.
- Has introduced a program Muscle and Motion in the educational process of physical education students in the study of professional disciplines. With Muscle and Motion athlete can provide power development of his body, the complex of exercises for certain areas of the body that muscles work in the performance of a movement. This program provides a detailed three-dimensional visualization of the anatomy of the human skeleton and muscles while performing strength training exercises, and many additional features

- Conclusion: Achieving high athletic performance requires a constant search for improving monitoring and training process. Currently, the development of information tools required to develop and analyze the effectiveness of programs to find ways to quality training and competitive athletes in training activities. With Muscle and Motion athlete can provide power development of his body, the complex of exercises for certain areas of the body that muscles work in the performance of a movement.
- Muscle and Motion program may need for effective training or for a person who begins to exercise, exercise equipment analysis, fundamental errors and potential problems, knowledge of how to work the muscles and joints and how to move without breaking anything. You can compose their own training plan: 1) Choose which muscles need to pump; 2) Select a few exercises proposed; 3) See how to stretch those muscles after exercise; 4) Choose the method of training; 5) See how to make optimal training plan for a week.

#### References:

- 1.Bubnov Formation of information culture of the future experts of physical education, sport and recreation / sports V.Bubnov // Young science of Ukraine. Coll. Science. works in the field of physical culture and sports. Vol. 8. 4-t. Lviv: Firm "Ukrainian technologies". 2004. T. 4. P. 43-46.
- 2. S. Garkusha Theoretical and methodological foundations for the formation of future specialists in physical education to use zdorov'yazberezhuvalnyh technology [Text]: Author. Dis. Dr. ped. Sciences: 13.00.04 / S.V.Harkusha / Chernihiv. nat. ped. University of them. Shevchenko. Chernihiv. 2015. 40 p.
- 3. VK Kaszuba Question K Using information technology system in the preparation of athletes yunыh / V.Kashuba, N.Panenko // Actual problems Preparation provisions in dispute dostyzhenyy High society: materials Internat. nauch. and practical. Kofn .: 2 vol. / Ed. .: M.E.Kobrynskyy count. Minsk: BHUFK. 2009. Vol.2. S.14-18.
- 4. BG Lukyanov Aparatnыy and software for complex movements vydeoanalyza sporsmenov / B.H.Lukyanov, B.Y.Sheyko, V.S.Fetysov, O.A.Dudov // Journal USATU. Management and BT And Vol.9. 2007. №5 (23) .- S.64-71.
- 5. Nosko MO Biomechanics of physical education and sport: a textbook for students of specialty "Physical Education" / Nosko MO, Brizhatyy OV, SV Garkusha, IA Brizhata K .: "Les MP", 2012. 287 p.
- 6. Muscle and Motion program source access: http://www.muscleandmotion.net/m&m

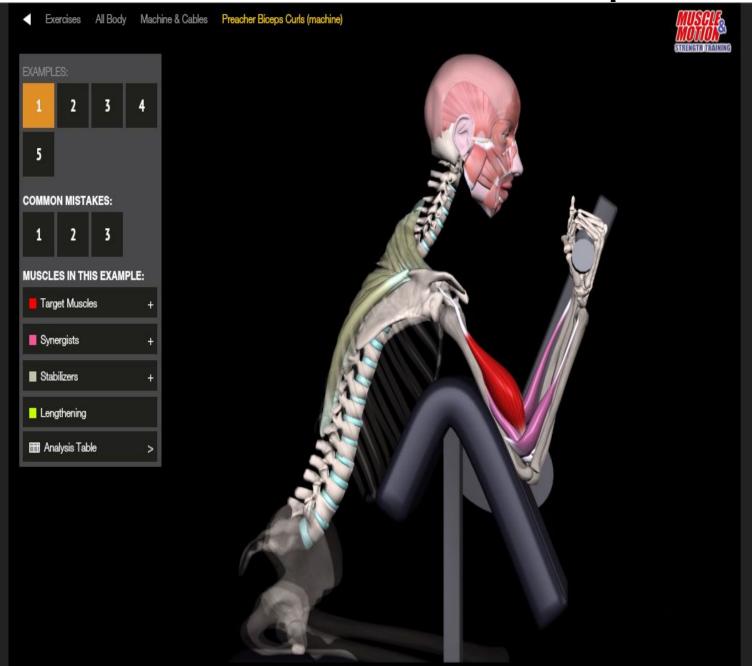
#### Start watching program Muscle and Motion



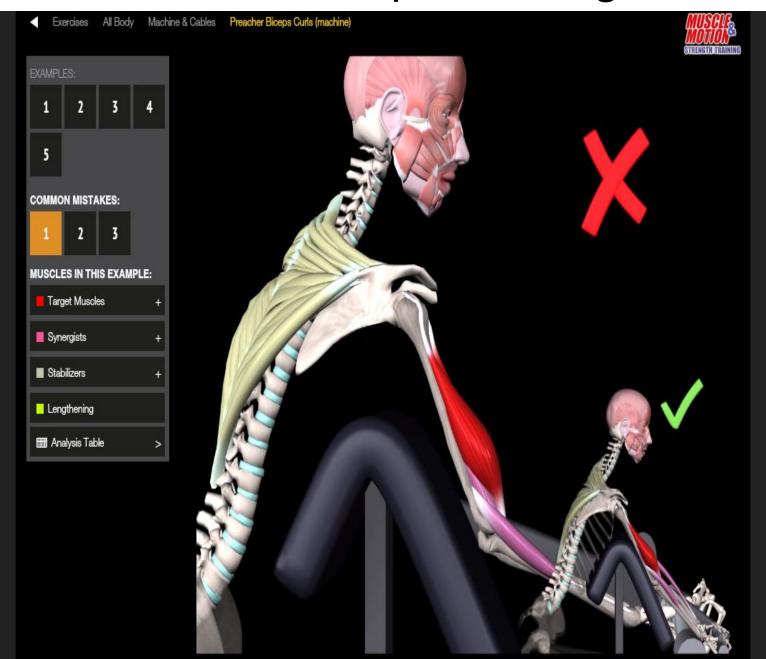
You can see the muscles of the human body (biceps brachii)



#### What exercises and how to perform



#### Possible errors when performing exercises

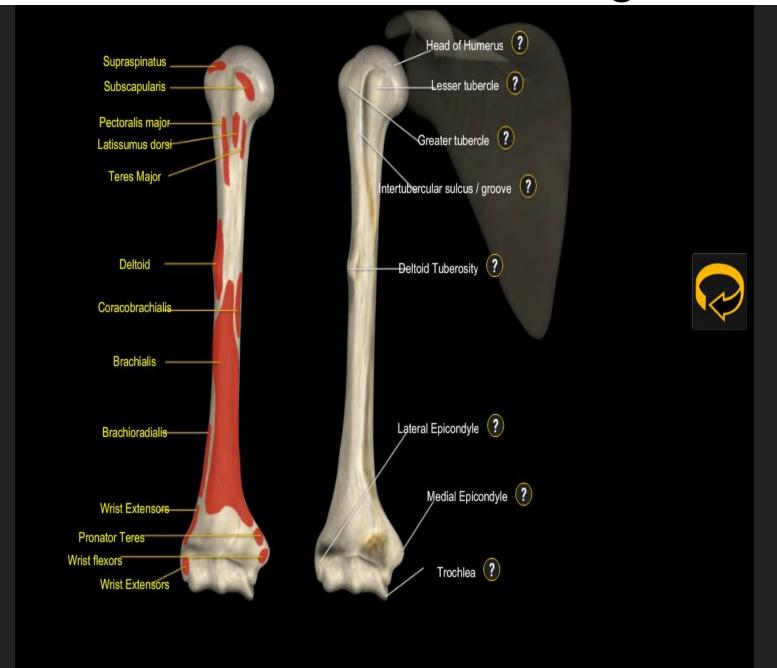


#### You can see how muscle is built



Origin (proximal attachment): Coracoid process of the scapula

### Available views constructing bones



# Viewing exercise which muscles are involved with



## Thank you for attention!!!