SCIENCE BEHIND THE SPORTS COACHING

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INTRODUCTION

Science is concerned with applying the study of movement/science to sporting activities. The main purpose of science is to assist an athlete in maximizing his potential with the least possible risk of injury. The importance of science is the prediction of an individual's ability relating to the sporting world, the individualization of training programs according to specific needs and to identify possible strengths, weaknesses and prevent future injuries. Sport science focus on the scientific testing of athletes during off season, pre-season and competition season. Fitness components that are focused upon include the following: Aerobic capacity, anaerobic capacity, muscle power, strength, endurance, agility and speed. Specific tests are used, areas of concern are identified and worked upon, fitness levels are monitored and recovery techniques are incorporated. In sport the most important coaches are usually those working at grassroots level and in most cases they are volunteers giving up their own time for the love of their chosen sport. Coaches are seen to be those of knowledge and are well respected figures in all sports. Sports coaches help people participating in sports to work towards achieving their full potential working with them closely to improve performance. Sports coaches bring out ability by identifying needs and planning and implementing suitable training programmes. Whatever the context, coaching involves developing the participants' physical and psychological fitness and providing the best possible practical conditions in order to maximise their chances of performing to the best of their ability. There are many different roles of a sports coach often depending on the environment or what level they are working. In grassroots level a coach can be the bus driver, taxi driver, kit manager, first aid, counsellor, leader, role model and a friend all as a coach. While in the professional ranks the coach simply has to concentrate solely on coaching and improving performances. Sports Science contributes significantly to the enhancement of sports performance and holistic development of people. Sport, whether at a recreational, competitive or administrative level, provides a significant learning experience Promoting awareness of a healthy life-style, fostering leadership and organizational skills, building positive character traits and creating opportunities to excel. This is bound to promote capacity building and the empowerment of sports People and bodies throughout countries in Sports Science and Coaching Undergraduate is offered. The programme is designed to provide students with in depth knowledge and understanding of Sport and Exercise Sciences. The department offers opportunities for study and research in various sporting disciplines and the disciplinary sciences which form the basis for training methods, training management, coaching strategies and performance improvement. A coach's primary mission is to help athletes develop and improve, and to fulfil that aim coaches require a set of functional competences. So it stands to reason that coach education and development must entail the establishment of effective behaviours, skills and attitudes, and not merely the accumulation of knowledge. A fully educated and developed coach, therefore, requires sufficient time, motivation, application and practice. Like athletes, coaches grow through exposure to learning situations and opportunities. The most common of these is on-the-job experience often preceded by participation as an athlete.

CONCLUSIONS

Sports Science and Coaching provide a high level of intellectual challenge through the study of biomechanical, physiological, psychological; sports and exercise applications and research dimensions of sport and exercise sciences. Sports Science and Coaching apply scientific methods and techniques to the study of sport and exercise sciences. Sports Science and Coaching equip students to work independently and as part of a team to examine theoretical and practical issues in sport and exercise sciences. Sports Science and Coaching help the student critically evaluate coaching and training requirements in relation to exercise and human performance. Sports Science and Coaching prepare graduates to undertake, lead and develop sport and exercise sciences, and related areas. Sports Science and Coaching promote the advancement of teaching and research in sports within the academic environment and the sporting industry. Sports Science and Coaching promote the growth and the application of the highest quality research and professional application of sports science in health promotion, disease prevention, rehabilitation and sports fitness training. Sports Science and Coaching promote the exchange of scientific information between the departments other institutions and organizations with an interest in sports. Sports Science and Coaching be a dynamic and action-oriented institution for solutions related to sports science and coaching.

REFERENCES

4. Edward Hitchcock, Jr., (1826—1911) Amherst College Professor of Hygiene and Physical Education, devoted his academic career to the scientific study of physical exercise, training and the body. Co-authored 1860 text on exercise physiology.