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Abstract

The study of possible relationships between scientific physical activities, sports, new technology and disabilities educational environment is still an area of research relatively unexplored. The original field of investigation to facilitate a necessary motion-synthesis technology, requires a complex study of the person and the unexplored potential that characterize it and which technologies can be used in a "different and original" to promotethe integration processes. This study horizon, the first to approach the various dimensions that can be connected educationally technologies, the movement and disability in educational contexts, requires an epistemological reflection to clarify the ethical value of "diversity", the significance of the presence of students with disabilities in construction of a training group class in order to transform the integrity of the companions with disabilities in an educational resource and teaching for all.

The disability is, in fact, an 'opportunity for growth of the original group, a constant strain on the school curriculum to build a special area and multiesperienziale to experience an alternative system of learning and to develop skills and cognitive skills too often compressed by the traditional system teaching. The presence of the disabled student is a true "search engine"of the different cognitive styles, a methodological stimulus to the use of different dimensions of cognition, as "an education built on multiple intelligences can get stronger and more effective than a built on only two, being able to develop a wider range of talents and make the traditional curriculum accessible to a larger number of students. The movement activities in the complexity of application fields healthy, sporting, recreational, social and adaptive, are a training environment with a strong educational value, an original area of enhancement of the subject even in the presence of psycho-physical and sensory difficulties, but it requires technology and supports that guarantee rights and opportunities to facilitate the participation of disabled people. The primary school in particular, the first educational institution should ensure that the right and duty of person with
disabilities, in recent decades has been a veritable laboratory of teaching and experimenting on account of a specific training, routes of integration that have capitalized on the size Kinaesthesis-body of the person. The research on the relationship between body, technology and education to the education of the disabled in childhood and adolescence, becoming a complex and plural perspective of movement science, able to fully express its educational dimension into a Key integrated and systematic study has combined:

- the relationship between body, movement and access to knowledge;
- the potential adaptive and motion compensation and its possible use 
educability finalized and the construction of different abilities;
- the characteristics and methods of use of technologies in the process of 
facilitating access to training, including education-motor-sport.

The work, in its initial part, was characterized by the construction of an epistemological framework of the interdisciplinary educational side of the motor and sports activities that investigating the relationship between body, movement and learning process, has highlighted the centrality of the body-size Kinaesthesis processes construction of knowledge and the potential of education, training and integrating a practice-oriented education to the enhancement of physical activities and sports also in their adapted form.

The analysis of the scientific roots of the game and physical activities and sports, the possible relationship between movement and experience play in the educational environment, required a study of the history of sport in its evolutionary stages, from the classical world to the contemporary age, deepening certain stages of a process of social and cultural transformation that has involved traditions, political ideologies, philosophical, religious doctrines. The scientific awareness of the relationship between body size, moral and spiritual and educational models required a dynamic reading of the phenomenon of motor-sport and diversabilità, subject and object of different cultures and social organization. In particular, the psycho-pedagogical sciences, have gradually allowed a correlation of motor-sport activities to the educational values and processes of learning, recognizing the recreational dimension
a key role in mental and physical development of the child in the body and the first instrument of access to knowledge. Activism J. Dewey and M. Montessori, the cognitive approach of J. Bruner, J. and sensory-motor Piaget, pluralism H. Gardner, the emotional approach of D. Goleman, D. metacognitive approach P. Ausubel and J. P. Novak, have contributed to the enhancement of body-size Kinaesthesia as the basis for all learning and the recognition of a plurality of independent but interacting Frames of Mind, to the appreciation of the "emotional mind" that can influence our rational action and the communication of our emotion and said, indirectly, a revaluation of the games engine, the various forms of sports games and movement activities as tools for training and opportunities for personal expression of children.

Reading philosophical dimension of the relationship between biological, psychological and social, and the original contribution of M. Merleau Ponty, allowed an analysis of the relationship between practice and motor sport and social models, identifying the body in motion and a precious instrument of mediation with the world.

The study, still, the main theoretical approaches related to body communication through the contributions of P. Watzlawich, M. Argyle, V. Birkenbihl, E. Goffman has fostered understanding of the many "immediate" body signals revealing part of that alphabet which is the "body language".

Recent studies in neuro-bio-physiological, neural Dawin thanks to GM Edelman and the studies of G. D. Kandel, the contributions of A. Damasio and J. LeDoux, G. Rizzolattiti, A. Berthoz have provided meaningful answers to science on the cognitive and emotional mechanisms, analysis of the movement and the amazing ability and anticipatory simulation of the brain, opening new horizons of learning and doing education. Although not of recent development, the approach of Donald Hebb neurodidattico scientifically justified the subjectivity of memory processes and the relationship between emotion and learning, inspiring and directing a search of the stimulus continues strong in the educational processes and urging, by implication, the exploration of new interdisciplinary fields such as motor sports.

His theory download-Connect has been a new horizon of education, an unexplored field open to the leadership of new teaching methods, a neurobiological and
psychological terrain that has encouraged a vision of the teaching-oriented and supported by motor and bodily experiences. The portability of subject content, through the bodily experience gives access to multiple knowledge, able to anchor itself to the different channels simultaneously cognitive and sensory-perceptual. The body becomes the subject interacting to solve problems, to the elaboration of alternative or complementary approaches of knowledge, a real driver of support for teaching, learning environment where you can follow a complex route where you can open spaces of the 'knowledge', know-how and ability to be 'education through a subsidiary. His new mode allows you to adjust teaching and use from time to time various forms of analog communication, to guide and support with the help of gestures, encouraging Kinaesthesia constant action and the relationship between a plurality of formae mentis creating an environment of learning-motor sports which enhance the skills and abilities potentially vicariant training plan, open windows on the world of hardship, disability, and more generally on how to build successful training, providing education to the world the possibility of a rethink educational practice that starts from the subjective, individual needs of the person, inseparable from its body-cognitive and emotional.

In this reading activities and sports become facilitators of pathways modulators and cooperative and supportive, fielding values such as tolerance, solidarity and respect for differences and stand as channels for access to knowledge for people with disabilities supported by presence on the national and international organizations such as Special Olympics and CIP that promote participation in sport and a wide range of laws that protect their right to social integration.


The reflection at this point, we extended the theme of accessibility and adaptability of tools and technology in education. This study was born of a prior analysis of the benefits that users with different abilities can be obtained from use of software and devices specific to the type of sensory deficit and being. The suggestion, moreover, a design of spaces in which to carry routes that are inspired by alternative and complementary ways of teaching to traditional teaching, determined at the end of the work, the examination of the most important technologies on the functional market testing of different ways of applying the knowledge learned and the stimulation of new forms of knowledge through the body and movement. In particular, the different types of technological systems presented (motion capture, platforms torque, calorimeters) opens the scenarios unimaginable a few years ago in the field of communication and study, with regard to inclusive education, and enhance the teaching of the research new methods of teaching of disciplinary knowledge and new methods of analysis and evaluation of the quantities involved in the movement, posture gestures motor, motor sequences in co-ordinated models of the disabled.